

B4400/4500/4600

Users Guide



59388901

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Document Information

B4400/4500/4600 User's Guide

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Regulatory Information



This product complies with the requirements of the Council Directives 89/336/EEC (EMC) and 73/23/EEC (LVD) as amended where applicable on the approximation of the laws of the member states relating to electromagnetic compatibility and low voltage.

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Notes, Cautions and Warnings

NOTE: A note appears in this manual like this. A note provides additional information to supplement the main text which may help you to use and understand the product.

CAUTION! A caution appears in this manual like this. A caution provides additional information which, if ignored, may result in equipment malfunction or damage.

WARNING! A warning appears in this manual like this. A warning provides additional information which, if ignored, may result in a risk of personal injury.

Introduction

Congratulations on purchasing this OKI monochrome page printer.

Your new printer is designed with a range of advanced features to give you crisp black and white pages at high speed on a wide range of print media.

About this manual

This manual has been written using more than one printer as a model and the illustrations/screenshots reflect this. What you see will be appropriate to the model you are using.

Online usage

This manual is intended to be read on screen using an Adobe Acrobat Reader. Use the navigation and viewing tools provided in Acrobat.

You can access specific information in two ways:

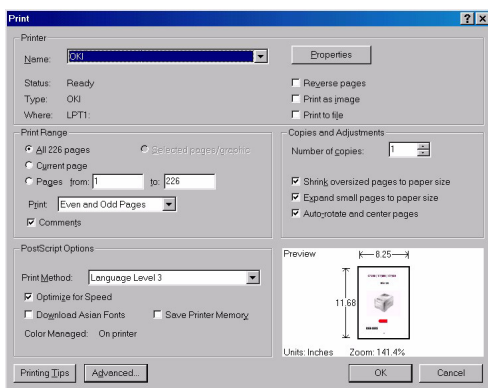
- In the list of bookmarks down the left hand side of your screen, click on the topic of interest to jump to the required topic. (If the bookmarks are not available, use the Table of Contents.)
- In the list of bookmarks click on Index to jump to the Index. (If the bookmarks are not available, use the Table of Contents.) Find the term of interest in the alphabetically arranged index and click on the associated page number to jump to the page containing the subject.

Printing Pages

The whole manual, Individual pages, or sections may be printed. The procedure is:

1. From the toolbar, select [File], then [Print] (or press the Ctrl + P keys).
2. Choose which pages you wish to print:
 - [All pages], for the entire manual.

- [Current page] for the page at which you are looking.



- [Pages from] and [to] for the range of pages you specify by entering their page numbers.

3. Click on [OK].

Abbreviations used

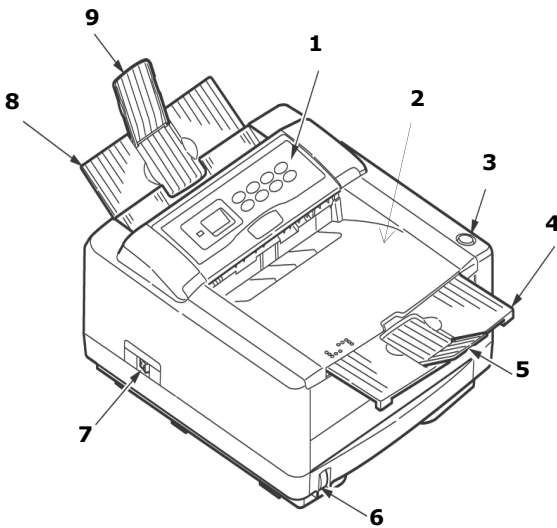
The following abbreviations are used in this manual:

Abbreviation	Meaning
Ctrl	Control
dpi	dots per inch
DIMM	Dual In-line Memory Module
n	network card installed
LED	Light Emitting Diode
MFT	Manual Feed Tray
MPF	Multi-purpose Feeder Tray
NIC	Network Interface Card
PCL	Printer Control Language
PS	PostScript (emulation)
PSE	PostScript Emulation
RAM	Random Access Memory
SIDM	Serial Impact Dot Matrix

Printer components

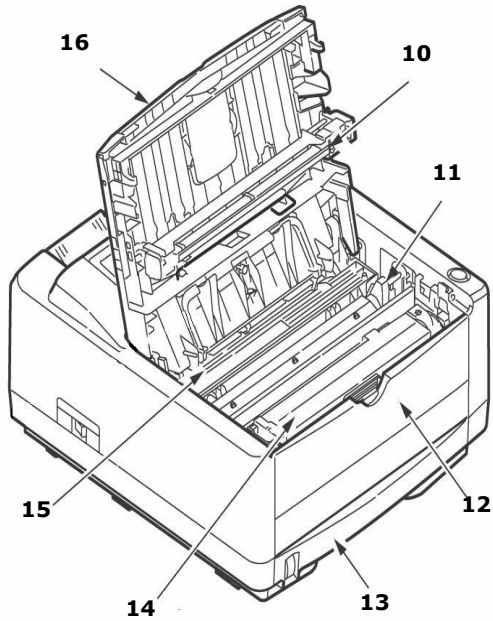
Apart from the Operator panels, which are described in the next chapter, the B4400, B4500, and B4600 printers look similar from the outside. The important components are identified in the representations below.

1. Operator panel (B4500 and B4600 shown)
2. Top paper exit bin (150 sheets, face down)
3. Top cover release button
4. Top paper exit bin extension
5. Top paper exit bin extension paper guide
6. Paper tray content indicator
7. ON/OFF switch
8. Rear paper exit tray (50 sheets, face up)
9. Rear paper exit tray paper guide



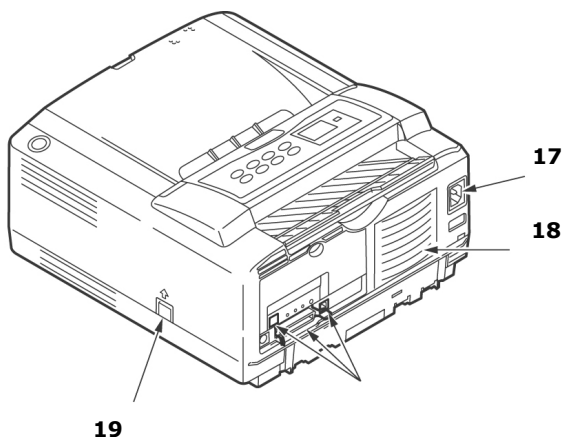
10. LED array
11. Image drum
12. Manual feed tray (single sheet) (shown in closed position)

- 13.** Paper feed tray (250 sheets)
- 14.** Toner cartridge
- 15.** Fuser unit
- 16.** Top cover



- 17.** Power cable connection
- 18.** Cooling fan

19. Multi-function tray (optional) connection



20. Second paper tray (optional) connection

21. Parallel interface connection

22. USB interface connection

Network card (optional on non-network models)

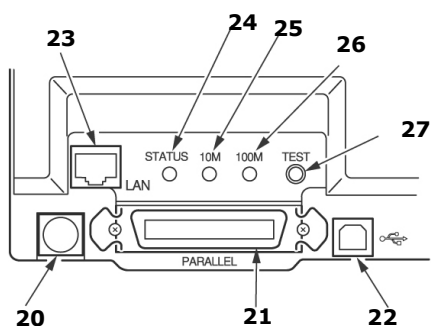
23. Network interface connector

24. Status lamp

25. 10M lamp

26. 100M lamp

27. Test switch



Installation

Operation Environment

- A firm surface such as a table or desktop
- Space to open the cover, and pull out the paper tray and the rear paper output extender
- Air circulation around the printer to prevent overheating
- A nearby power source
- Room temperature of 50° to 90° F (10° to 32° C).
- Relative Humidity of 20-80%
- No direct sunlight

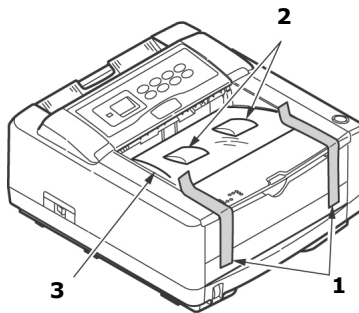
Unpacking

NOTE: Save packing materials, including the black light-shield bag for storing the image drum, in the event that you need to repack the printer for shipment.

Check contents:

1. Printer
2. Power cord
3. Toner cartridge
4. Black light-shield bag
5. Quick Installation Guide
6. CD ROM: Printer installation/User Guide pdf
7. Safety and Warranty booklet
8. Registration card

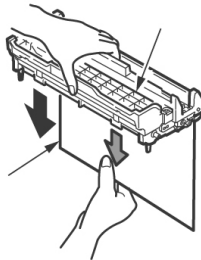
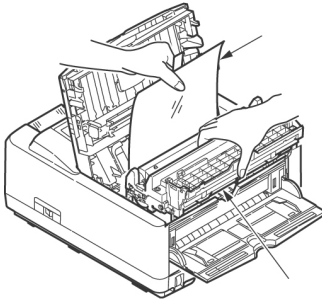
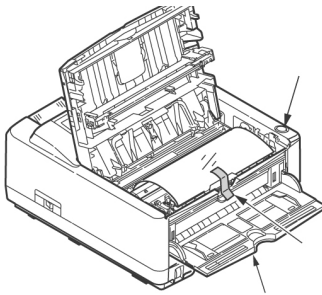
Remove shipping tape (1), desiccant agent (2) and film (3).



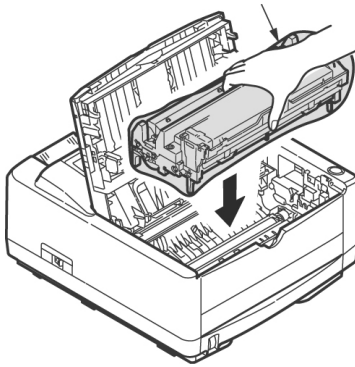
Prepare the Image Drum

CAUTION! The green image drum surface is very delicate and light sensitive. Do not touch it and do not expose it to sunlight or room light for more than 5 minutes. If the drum unit needs to be out of the printer for longer, please wrap it inside the provided black plastic bag to keep it away from light.

1. Press the button on the right to open the top cover.
2. Open the manual tray and lift the blue tape.
3. Carefully lift the drum cartridge and remove the tape with the protective film.

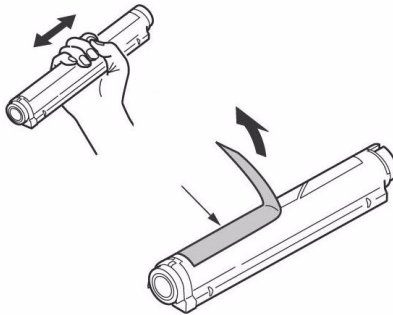


4. Return the image drum cartridge. Make sure it is seated correctly.



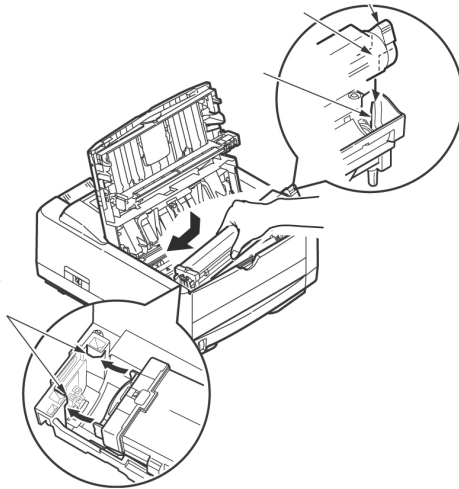
Installing the Toner Cartridge

1. Remove the toner cartridge from the packaging.
2. Shake it from side-to-side a few times to distribute the toner.
3. Carefully turn the cartridge over and remove the tape.

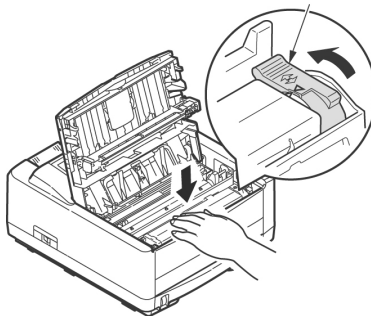


4. Turn the cartridge right-side-up with the blue lever on the right.

5. Insert the cartridge into the image drum, left side first as shown.



6. Lower the right side, making sure the cartridge is seated securely.
7. Hold the cartridge down in place, then push the blue lever to the back of the printer as far as it will go.

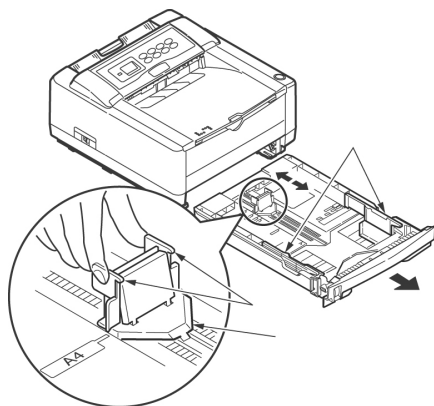


NOTE: If **TONER LOW** displays on the operator panel or the online Status Monitor after installing a toner cartridge, reinstall it.

Installing paper

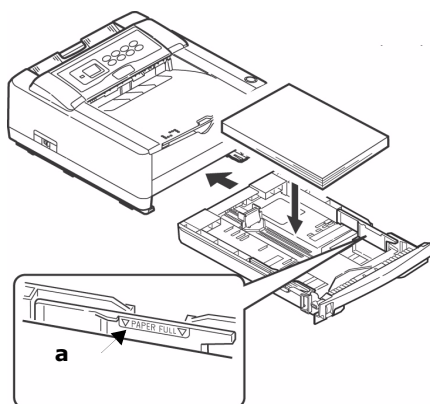
1. Pull the paper cassette out.

2. Set the paper stopper at the back to the paper size you are using.
3. Set each side's paper guide until it clicks.



4. Place paper in the cassette (maximum 250 sheets at 20 lb. [80g/m²]).

NOTE: Do not install paper over the PAPER FULL mark (a).



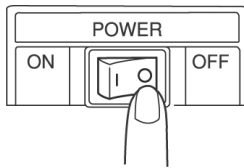
Installing Optional Accessories

NOTE: To print from Tray 2 or the Multi-Purpose Feeder tray, you must select these devices in the device options tab in the printer driver.

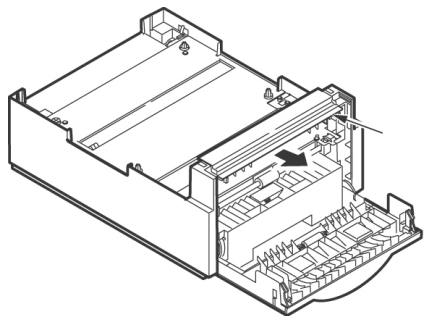
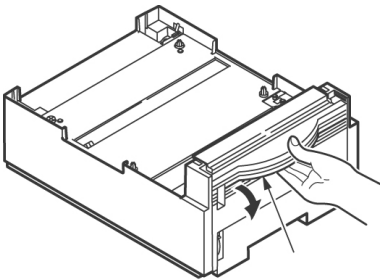
Second Paper Feeder

The optional second paper tray provide 500 additional pages, for a total of 750 pages of continuous printing with the standard paper cassette.

1. Turn OFF the power and detach the power cord and printer cable.

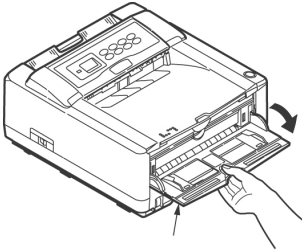


2. Prepare the feeder: pull the front cover, then move the sheet guide in the direction of the arrow until it stops.

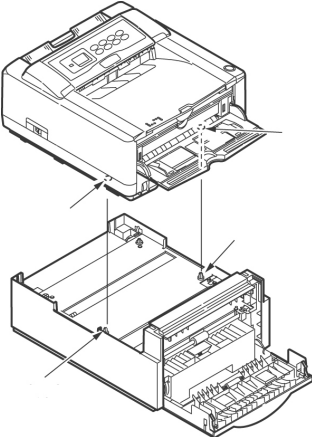


3. Open the manual tray.

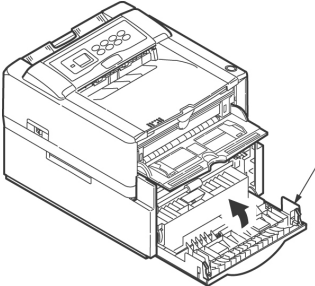
NOTE: The manual tray must remain open when the feeder unit is installed.



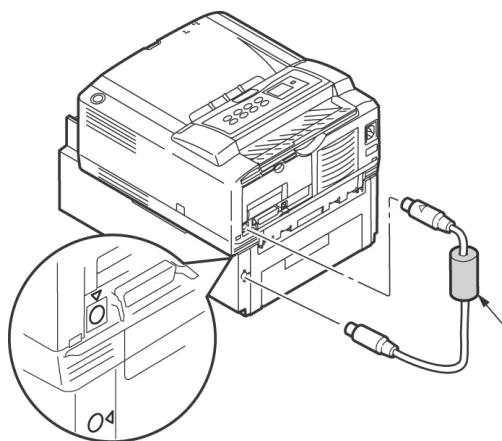
- 4. Set the projections on the feeder unit to the slots at the bottom of the printer.
- 5. Place the printer on the feeder unit.



- 6. Close the feeder's front cover.



7. Insert the connecting cord attached to the feeder unit into the printer, matching the arrow marks.



8. Attach the power cord and the printer cable and turn ON the power.
9. Print the Menu Map to confirm that the feeder unit is correctly installed. Check that TRAY2 is displayed in the Media Menu. Refer to "Printing menu settings" on page 31 for details.

Set the feeder unit in the printer driver

Windows

1. Select Start>Settings>Printers and Fax for Windows® XP, and Start>Setting>Printers for Windows 2k/NT 4.0/Me/98.
2. Right click your OKI printer icon to select Properties.
3. Check [Extended feeder unit] in Available Devices in the[Device Options tab, and click [OK].

NOTE: When connecting to a network by TCP/IP, it is automatically set when you click [Obtain printer information].

Macintosh

1. Select Selector in the Apple menu.
2. Select the OKI printer USB icon.
3. Select Printer Name and click Set.
4. Click Print Dialog.

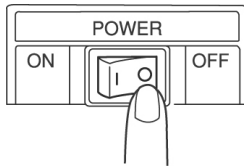
5. Select Enable in Feeder unit on the Options panel, click Set.
6. Click Save to close the selector.

Multi-purpose Feeder

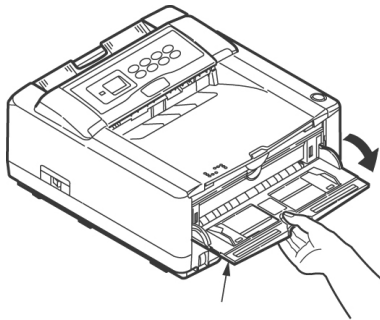
The Multi-purpose Feeder tray allow you to feed postcards, envelopes, labels and transparencies continuously.

NOTE: Install the Second Paper Tray first when using with the Multi-purpose feeder.

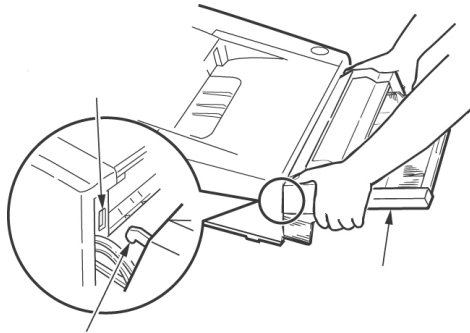
1. Turn off the printer.



2. Open the manual tray.

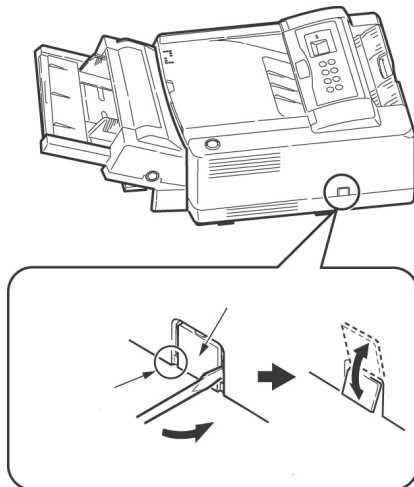


3. Insert the metal hook on each side of the Multi-purpose feeder into the slots on each side of the printer.



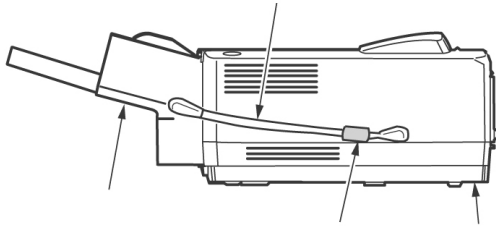
Connect the connecting cord.

4. Insert a flat-blade screwdriver on the side of the connector cover and move it downward to detach the cover.
5. Move the cover piece up and down repeatedly until it detaches from the printer.



6. Insert the connecting cord into the connector on the printer, matching the arrows.

7. Insert the other end into the Multi-purpose feeder, matching the arrows.



8. Turn ON the printer.
9. Print the Menu Map to confirm that the Multi-purpose feeder is correctly installed. Check that MPF is displayed in the Media Menu. Refer to "Printing menu settings" on page 31 for details.

Set the feeder unit in the printer driver

Windows

1. Select Start>Settings>Printers and Fax for Windows® XP, and Start>Setting>Printers for Windows 2k/NT 4.0/Me/98.
2. Right click your OKI printer icon to select Properties.
3. Check Multi-purpose feeder in Available Devices in the Device Options tab, and click OK.

NOTE: When connecting to a network by TCP/IP, it is automatically set when you click [Obtain printer information].

Macintosh

1. Select Selector in the Apple menu.
2. Select the OKI printer USB icon.
3. Select Printer Name and click Set.
4. Click Print Dialog.
5. Select Multi-purpose Feeder on the Options panel, click Set.
6. Click Save to close the selector.

Operator panels

This chapter describes the function of the operator panels. It is useful to describe the Status Monitor software at this point as it provides the B4400 with status information and the equivalent of the menu control panel on the B4500 and B4600. (See "Printer Drivers" for installation of the Status Monitor.)

B4400

Operator panel

NOTE: The easiest way to check the status of the B4400 is to use the online Status Monitor. We'll tell you more about the Status Monitor on page 26.

The B4400 operator panel consists of 4 LED indicators and an OnLine button. From left to right, the LEDs indicate Power On, Ready, Manual feed and Error.



LED indicators

The LED indicators show the status of the printer and have five operating conditions as follows:

- Indicator off
- Indicator on
- Flash 1 - slow blink - 1 long flash every 4 seconds
- Flash 2 - blink - 1 flash per second
- Flash 3 - rapid blink - 4 flashes per second.

All four LED indicators come on momentarily when power is turned on.





Power on LED (green)

This indicator comes on and stays on when the printer is turned on.

Ready LED (green)

- Indicator **on** - the printer is **on-line** and ready to receive data.
- Indicator **off** - the printer is **off-line** and cannot receive data.

The meaning of the indicator LEDs when they flash (x) is summarized as follows:

				Meaning
X	X			On Line.
X				Off Line.
X	X Flash 1 – slow blink			Printer is warming up/ processing/ printing.
X			X Flash 1 – slow blink	No paper in the tray.
X			x Flash 2 – blink	Paper Jam.
X			X Flash 2 – blink	Toner low/Drum near end of life.
X			X Flash 3 – rapid blink	Drum Cartridge at end of life.
X Flash 3 – rapid blink	X Flash 3 – rapid blink	X Flash 3 – rapid blink	X Flash 3 – rapid blink	Turn the printer off and on again. If this does not clear the error, call for service.

OnLine button

The primary functions of the OnLine button are activated by pressing the switch momentarily and releasing. The primary functions are as follows:

- Turning the printer off-line.
- Turning the printer on-line (ready).
- Resuming printing after a paper error, paper jam, print overrun, page overflow, or receiving buffer overflow.
- Interrupting data processing when the printer is receiving and processing data.

- Resuming data processing.

The secondary functions of the OnLine button are activated after turning the printer off line, then pressing and holding the switch for at least two seconds before releasing. The secondary functions are as follows:

- Printing the demo and menu pages.

NOTE: Demo and menu pages can also be printed using the printer Status Monitor

- Printing any data held in the buffer after printing has been cancelled.

The other functions of the OnLine button are activated after turning the printer off line then pressing and holding the switch for at least five seconds before releasing. The other functions are as follows:

- Printing a cleaning page.

NOTE: A Cleaning page can also be printed using the printer Status Monitor.

- Resetting the printer and clearing the buffer after printing has been cancelled.

NOTE: To reset the printer to the factory default settings, press the OnLine button and hold it down while the printer is turned on. The LED indicators blink when the printer has reset to the default settings.

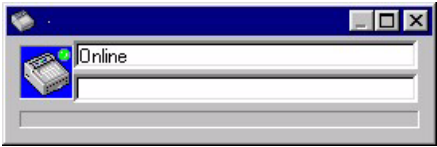
B4400 Status Monitor

After installing the printer driver software, the Status Monitor is then installed to indicate what is happening to the printer when it is being used. (See the chapter entitled "Printer Drivers.") This Status Monitor is also used to control and change the various printer settings.

Using the Printer Status Monitor

Viewing the status of the printer, and viewing or changing the printer settings are carried out as follows:

- 1. Click Start>Programs>OkiData>B4400 Status Monitor and select **Status Monitor**. The current printer status is shown on the minimized screen.



NOTE: To open the Status Monitor quickly, click on the printer icon on the Windows Task Bar.

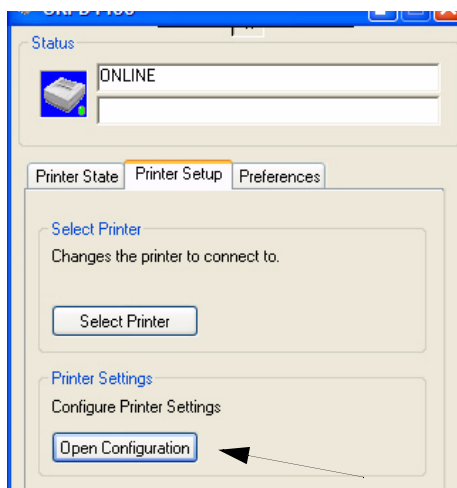


- 2. Click on the window **maximize** button (a) and the view expands to include the **Printer Setup** and **Preferences** tabs.



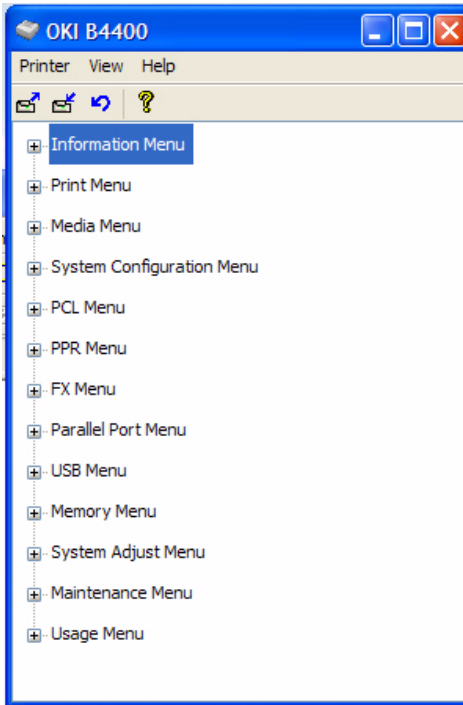
Printer Setup Tab

Select this tab to access to the Open Configuration button.



Configuration Menu

The Configuration Menu is available to choose settings for your printer. Detailed help is provided by clicking on the item, then clicking **Help**.



Menu Categories:

Information Menu: Print Menu Map; Print File List, Print PCL Font List; Print IBM PPR Font List; Print EPSON FX Font List; Print Demo1.

Print Menu: Copies; Manual Feed Mode; Paper Source; Auto Tray Change; Auto Tray Sequence; Paper Size Check; Resolution; Toner Save; Orientation; Lines Per Page; Edit Size.

Media Menu: Tray 1; Tray 2 (if installed); MPF (if installed) Manual Tray; Custom Paper Size.

System Configuration Menu: Power Save; Emulation; Clearable Warnings; Clear Errors; Manual Feed Timeout; Wait Timeout; Print Continuation at Toner Low; Jam Recovery; Status Display Language.

PCL Menu: Font Source; Font Number; Font Pitch; Font Size; Symbol Set; A4 Width; White Page Skip; CR Function; LF Function; Unprintable Area; Pen Adjust.

PPR Menu: Font Pitch; Font Pitch in Condense Mode; Character Set; Symbol Set; Letter O Style; Zero Character; Line Pitch; White Page Skip; CR Function; LF Function; Line Length; Form Length; TOF Position; Left Margin; Fit to Letter; Character Height.

FX Menu: Font Pitch; Character Set; Symbol Set; Letter O Style; Zero Character; Line Pitch; White Page Skip; CR Function; Line Length; Form Length; TOF Position; Left Margin; Fit to Letter; Character Height.

Parallel Port Menu: Parallel Port; Bi-directional; ECP Mode; ACK Width; Busy/Ack Output Sequence; I-Prime.

USB Menu: USB; Software Reset; Serial Number.

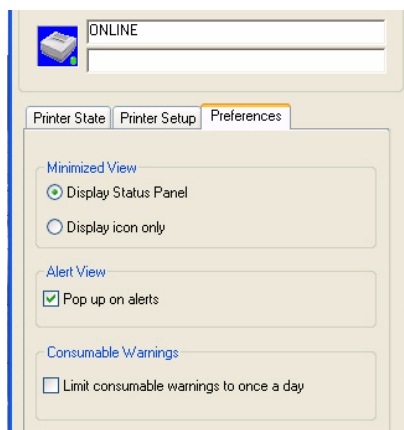
Memory Menu; Receive Buffer Size.

System Adjust Menu: X Adjust; Y Adjust; Tray ID; Place Page.

Maintenance Menu: Reset Menu; Reset Drum Count; Power Save; Transfer Setting; Darkness; Print Cleaning Page.

Usage Menu: Total Sheets; Drum Life; Toner Life.

Preferences Tab



Selecting this tab lets you choose the information displayed by the Status Monitor and how/when the Status Monitor appears.

The default Alert view setting ensures that the Status Monitor pops up to inform you of a condition that requires your attention, e.g. toner low.

Menu functions

The printer menu settings made from the Status Monitor can be seen collectively on a printed Menu Map. (For details of how to print such a map, see the next section.)

It should be noted that many of these settings can be, and often are, overridden by settings made in the printer drivers. However, several of the driver settings can be left at "Printer Setting," which will then default to the settings entered in these printer menus.

The menu functions and their default values are summarized in the table in the section entitled "Menu Functions" in the following information about the B4500 and B4600 printers.

Printing menu settings

The menu settings can be printed as a menu map as follows.

From the Operator Panel

- 1.** Press the OnLine button to take the printer off-line.
- 2.** Press and hold down the OnLine button for at least two seconds, but less than five seconds.
- 3.** The printer prints a list of the menu settings and a demo print page.

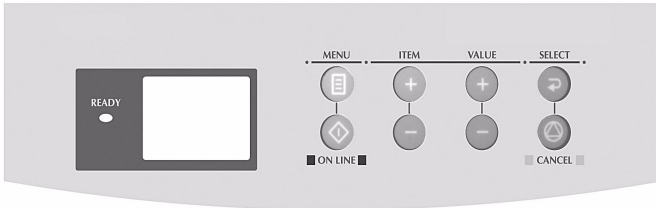
From the Status Monitor

- 1.** Select the Printer Setup tab.
- 2.** Click the Open Configuration button. The Printer Menu displays.
- 3.** Click Information Menu.
- 4.** Click Print Menu Map.
- 5.** Click Apply. Click OK.

B4500, B4600

Operator panel

The B4500 and B4600 operator panel consists of a menu driven control panel, an LCD display and a LED indicator.



Panel elements

Ready indicator (green). ON - ready to receive data. FLASHING indicates processing data or error.

Liquid crystal display. (LCD) panel. Two rows of up to 8 alphanumeric digits displaying print status, menu items in menu mode and error messages.

Menu button. Press briefly to enter the MENU mode. Press briefly again to select the next menu. Press for more than 2 seconds to scroll through the different menus.

Item (+) button. Press briefly to scroll forward to the next menu item.

Value (+) button. Press briefly to scroll forward to the next value setting for each menu item.

Select button. Press briefly to select the menu, item or value indicated on the LCD panel.

Cancel button. Press to cancel a print job.

Value (-) button. Press briefly to scroll backward to the previous value setting for each menu item.

Item (-) button. Press briefly to scroll backward to the previous menu item.

Online button. Press to switch between online and offline status.

NOTE: When pressed in Menu mode, the **Online** button returns the printer to online status. When pressed with DATA

PRESENT displayed, it forces the printer to print out the remaining data in the printer. Also when there is an error indicating wrong paper size, pressing the **Online** button forces the printer to print.

Using the Printer Menu

Menu functions

This section summarizes the menus accessed via the menu control panel and displayed in the LCD panel. The printer menu settings can be seen collectively on a printed Menu Map. (For details of how to print a Menu Map on the B4400/4500 printers, see page 45.)

It should be noted that many of these settings can be, and often are, overridden by settings made in the printer drivers. However, several of the driver settings can be left at "Printer Setting," which will then default to the settings entered in these printer menus.

Factory default settings are shown in the following tables.

Information Menu

This menu provides a quick method of listing various items stored within the printer.

INFORMATION MENU	
item	Action
PRINT MENU MAP	Execute
PRINT FILE LIST	Execute
PRINT PCL FONT	Execute
PRINT PSE FONT	Execute If PostScript Emulation kit is installed
PRINT IBM PPR FONT	Execute
PRINT EPSON FX FONT	Execute
DEMO1	Execute

Print menu

This menu provides adjustment of various print job related functions.

PRINT MENU		
item	Value	Function
COPIES	1* to 999	Set the number of copies.
MANUAL	OFF* ON	Sets printing from manual tray.
PAPER IN	TRAY1* TRAY2 MPF	Specifies a paper feed tray. *Displays installed trays only.
AUTOTRAY	ON* OFF	OFF: No optional tray installed ON: Tray2 or multi purpose feeder is installed.
TRAY SEQ	DOWN* UP PAPER FEED TRAY	Specifies a selection order in Auto tray.
SIZE CHK	ENABLE* DISABLE	Sets whether to check a paper size.
RESOLUTION	600* V1200 V2400	Sets dpi (dots per inch). *When printing with V2400, print time doubles.
TONER SAVE	DISABLE* ENABLE	Sets whether to save toner amount.
ORIENTATION	PORTRT* LANDSCAPE	Set print orientation.
LINES/PG	5 LNS 60 LNS* to 128 LNS	Sets the number of lines per page. This value is automatically adjusted when print orientation is changed.
EDT SIZE	CASSETTE* LETTER EXEC STATEMENT LEGAL 14 LEGAL 13 A4 A5 A6 B5 CUSTOM COM-9 COM-10 MONARCH DL ENV C5 ENV	Sets paper size when not specified by the computer. If Cassette is selected, paper size in tray is selected.

Media Menu

This menu provides adjustment to suit a wide range of print media.

MEDIA MENU		
Item	Value	Remarks
TRAY 1 PAPER SIZE	LETTER*, EXEC, STATEMENT, CUSTOM, A4, B5 LEGAL 14, LEGAL 13	Sets paper size for Tray 1.
TRAY 1 MEDIA TYPE	PLAIN*, LETTERHEAD, BOND, THICK, RECYCLE, CARD ROUGH	Sets media type for Tray 1.
TRAY 1 MEDIA WEIGHT	MEDIUM*, M HEAVY, HEAVY, LIGHT, M LIGHT,	Sets media weight for Tray 1.
TRAY 2 PAPER SIZE	LETTER*	When tray 2 is installed
TRAY 2 MEDIA TYPE	PLAIN*	When tray 2 is installed
TRAY 2 MEDIA WEIGHT	MEDIUM*	When tray 2 is installed
MFP PAPER SIZE	LETTER*	When multi purpose feeder is installed.
MFP MEDIA TYPE	LETTER	When multi purpose feeder is installed.
MFP MEDIA WEIGHT	MEDIUM*	When multi purpose feeder is installed.
MANUAL PAPER SIZE	LETTER*	Set paper size for manual tray.
MANUAL MEDIA TYPE	PLAIN*, LETTERHEAD, TRANSPARENCY, LABEL, BOND, RECYCLED, CARD, ROUGH	Set paper type for manual tray.
MANUAL MEDIA WEIGHT	MEDIUM*	Set paper type for manual tray
UNIT OF MEASURE	INCH*. mm	Set measure unit for custom paper.
X DIMENSION	8.5* 3.5 to 8.5	Set paper width for custom paper. <i>Value is calculated by Unit of Measure setting.</i>
Y DIMENSION	11.0* 5.8 to 14.0	Set paper length for custom paper. <i>Value is calculated by Unit of Measure setting.</i>

System configuration menu

This menu adjusts general printer settings to suit the way you prefer to work.

SYSTEM CONFIGURATION MENU		
Item	Value	Remarks
POWER SAVE DELAY TIME	15 MIN	Sets time to switch to power save mode.
EMULATION	AUTO*, PCL, ESP/ P	Select a printer language.
CLEARABLE WARNING	ON*, JOB	PCL: sets a tome to cancel the display of the recoverable error. ON = an error displays until the ONLINE switch is pressed. JOB = an error displays until the next job is received.
AUTO CONTINUE	ON*, OFF	Sets whether to recover the printer automatically when "overflow" or an error, including different paper size or type, occurs.
MANUAL TIMEOUT	60 SEC*, 30 SEC, OFF	Sets time to wait for setting paper in the manual printing. A job is canceled if paper is not set within specified time.
WAIT TIMEOUT	40 SEC*, 5 SEC, 300 SEC, OFF	Sets time to wait for setting paper in the manual tray. A job is canceled if paper is not set within a specified time.
LOW TONER	CONTINUE*, STOP	Sets whether to continue printing when TONER LOW is displayed. When STOP is selected, the printer goes offline until ONLINE is pressed.
JAM RECOVERY	ON*, OFF	Sets whether to start to print with a jammed page after a paper jam.
ERROR REPORT	OFF*, ON	Sets whether to print an error report when internal errors occur.

PCL emulation

This menu controls the printer's PCL emulation.

PCL MENU		
Item	Value	Remarks
FONT SOURCE	RESIDENT*, DLL FONT	Sets a locations for a font to be used. DLL FONT is displayed when a font is downloaded in RAM.
FONT NO.	I000*, to S001	Selects a font.
FONT PITCH	4.00 : 10.00* : 99.99	Sets the font width (characters per inch). Displayed when the font selected (Font No.) is a fixed space outline font.
FONT SIZE	4.00 : 12.00* : 999.75	Selects the font height (Point size). Displayed when the font selected (Font No.) is an outline font with proportional spacing.
SYMBOL SET	WIN3.1* PC-8PC-8	Selects a symbol set.
A4 PRINT WIDTH	78 COL* 80 COL	Sets the number of columns in Auto LF for A4 size paper.
WHITE PAGE SKIP	OFF* ON	Selects whether or not to skip a blank space.
CR FUNCTION	CR* CR+LF	Sets operation when a CR code is received.
LF FUNCTION	LF* LF+CR	Sets operation when a LF code is received.
PRINT MARGIN	NORMAL*, 1/5 inch, 1/6 inch	Sets the unprintable area of paper. NORMAL is 1/4 inch.
PEN WIDTH ADJUST	ON* OFF	With PEN WIDTH ADJUST set to ON, Adjusts a thin line to be more visible. When set to OFF, the line will appear as specified.

PPR Emulation

This menu controls the printer's PPR emulation.

PPR MENU		
Item	Value	Remarks
PITCH	10 CPI*, 12 CPI, 17 CPI, 20 CPI, PROP	Specifies character pitch.
CONDENSE	12 to 20* 12 to 12	Specifies 12 CPI pitch for Condense Mode.
CHAR SET	SET-2* SET-1	Specified character set.
SYMBOL	IBM-437*	Specifies symbol set.
LETTER O	DISABLE* ENABLE	Specifies the style that replaces f (9B) and ¥ (9D) with f (ou) and 0 (zero).
ZERO CHR	NORMAL* SLASHED	Specifies the style of 0 (zero).
LN PITCH	6 LPI* 8 LPI	Sets line space.
WHITE PAGE SKIP	OFF* ON	Set to eject a blank sheet. Available only when simplex is set.
CR FUNC	CR* CR+LF	Sets operation when CR code is received.
LF FUNC	LF* LF+CR	Sets operation when LF code is received.
LINE LENG	80 COL* 136 COL	Specifies the number of characters per line.
FORM LENG	LETTER* A4 12 INCH	Specifies the length of paper.
TOF POS	0.0 INCH* 0.1 INCH 1.0 INCH	Sets the position from the top edge of paper.
L MRGN	0.0 INCH* 0.1 INCH 1.0 INCH	Sets the amount to shift the horizontal print start position to the right.
FIT TO LTR	DISABLE* ENABLE	Sets the printing mode that can fit print data, equivalent to 11 inches (66 lines), in the LETTER size printable area.
TEXT HGT	SAME* DIFF	Sets height of a character. SAME: Regardless of CPI, same height. DIFF: According to CPI, character heights vary.

FX Emulation

This menu controls the printer's FX emulation.

FX EMULATION		
Item	Value	Remarks
PITCH	10 CPI* 12 CPI 17 CPI 20 CPI PROP	Specifies character pitch.
CHAR SET	SET-2* SET-1	Specifies character set.
SYMBOL	IBM-437*	Specifies a symbol set.
LETTER O	DISABLE* ENABLE	Specifies the style that replaces f (9B) and ʝ (9D) with f (ou) and 0 (zero).
ZERO CHR	NORMAL* SLASHED	Specifies the style of 0 (zero).
LN PITCH	6 LPI* 8 LPI	Sets line space.
WHITE PAGE SKIP	OFF* ON	Set to eject a blank sheet. Available only when simplex is set.
CR FUNC	CR* CR+LF	Sets operation when CR code is received.
LINE LENG	80 COL* 136 COL	Sets operation when LF code is received.
FORM LENG	LETTER* A4 12 INCH	Specifies the number of characters per line.
TOF POS	0.0 INCH* 0.1 INCH 1.0 INCH	Specifies the length of paper.
L MRGN	0.0 INCH* 0.1 INCH 1.0 INCH	Sets the amount to shift the horizontal print start position to the right.
FIT TO LTR	DISABLE* ENABLE	Sets the printing mode that can fit print data, equivalent to 11 inches (66 lines), in the LETTER size printable area.
TEXT HGT	SAME* DIFF	Sets height of a character. SAME: Regardless of CPI, same height. DIFF: According to CPI, character heights vary.

Parallel menu

This menu controls the operation of the printer’s parallel data interface.

PARALLEL MENU		
Item	Default	Remarks
PARALLEL	ENABLE* DISABLE	Sets parallel Interface.
BI-DIRECTION	ENABLE* DISABLE	Sets bi-directional parallel interface.
ECP	ENABLE* DISABLE	Sets ECP mode.
ACK WIDTH	NARROW* MEDIUM WIDE	Sets ACK width in compatible receiving.
ACK/BUSY TIMING	IN* WHILE	Sets the output order of BUSY and ACK signals in compatible receiving. ACK IN BUSY: BUSY+LOW-the end of ACK pulse. ACK WHILE BUSY: BUSY+LOW-center of ACK pulse.
I-PRIME	DISABLE* 3μ SEC 50μ SEC	Sets time to enable/disable the I-PRIME signal.

RS232C menu

NOTE: This menu displays only when the optional RS232C card is installed.

This menu controls the operation of the printer’s optional RS232C data interface.

RS232C MENU		
Item	Value	Remarks
RS232C	ENABLE* DISABLE	Sets RS-232C I/F.
FLOW CONTROL	DTR HI* DTR LO XONXOFF RBST XON	Selects BUSY Control Protocol.

RS232C MENU

Item	Value	Remarks
BAUDRATE	9600*, 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 76800, 115200	Selects communication speed with RS-232C I/F.
DATABITS	8 BITS* 7 BITS	Selects the number of data bits with RS-232C I/F.
PARITY	NONE* EVEN ODD	Selects method to add parity bit with RS-232C I/F.
MINUTES BUSY	200mSEC* 1 SEC	Selects BUSY clearing time with RS-232C I/F.

USB menu

This menu controls the operation of the printer's USB data interface.

USB MENU

Item	Default	Remarks
USB	ENABLE* DISABLE	Sets USB I/F.
SOFT RESET	DISABLE* ENABLE	Sets Soft Reset Command.
USB S/N	ENABLE* DISABLE	Sets USB Serial Number.
OFF REC	DISABLE	Only when PSE is installed

Network menu

NOTE: This menu displays only when the optional Network card is installed.

This menu controls the operation of the printer's 10Base-T/100Base-TX network interface.

NETWORK MENU		
Item	Default	Remarks
TCP/IP	ENABLE* DISABLE	Sets TCP/IP protocol.
NETBEUI	ENABLE* DISABLE	Sets NetBEUI protocol.
NETWARE	ENABLE* DISABLE	Sets Netware protocol.
ETHERTALK	ENABLE* DISABLE	Sets EtherTalk protocol.
FRAME TYPE	AUTO* 802.2, 802.3, ETHER II SNAP	Sets Frame Type. <i>Not displayed when NETWARE is set to DISABLE.</i>
IP ADDRESS SET	AUTO* MANUAL	Specifies a setting method of IP address. <i>Not displayed when NETWARE is set to DISABLE.</i>
IP ADDRESS	000 to 255	Sets the IP Address. <i>Not displayed when TCP/IP is set to DISABLE.</i>
SUBNET MASK		Sets the subnet mask. <i>Not displayed when TCP/IP is set to DISABLE.</i>
GATEWAY ADDRESS		Sets the gateway address. <i>Not displayed when TCP/IP is set to DISABLE.</i>
INITIALIZE NIC?	EXECUTE	Specifies whether to initialize Network Menu. <i>Not displayed when TCP/IP is set to DISABLE.</i>
WEB	ENABLE	Sets WEB. <i>Not displayed when TCP/IP is set to DISABLE.</i>
TELNET	ENABLE	Sets TELNET. <i>Not displayed when TCP/IP is set to DISABLE.</i>
FTP	ENABLE	Sets FTP. <i>Not displayed when TCP/IP is set to DISABLE.</i>
SNMP	ENABLE	Sets SNMP.
LAN	NORMAL* SMALL	Sets LAN.
HUB LINK SETTING	AUTO NEGOTIATE* 100 FULL 100 HALF 10 FULL 10 HALF	Sets HUB LINK SETTING.

Memory menu

This menu determines how printer memory is used.

MEMORY MENU		
Item	Default	Remarks
REC BUF SIZE	AUTO* 0.1MB 0.2MB 0.3MB	Set the size of the Receive buffer.

System adjustment menu

This menu provides fine adjustment of image position on the printed page in steps of 0.25mm.

SYSTEM ADJUSTMENT MENU		
Item	Default	Remarks
X ADJUST	0.00 mm* +0.25 mm +2.00 mm -2.00 mm -0.25 mm	Adjust position of print image in a horizontal direction. An image over the printable area is not printed.
Y ADJUST	0.00 mm* +0.25 mm +2.00 mm -2.00 mm -0.25 mm	Adjust position of print image in a longitudinal direction. An image over the printable area is not printed.
PCL MANUAL ID	1 2* -59	Sets the # to specify Manual Feed for the media source command (ESC & I # H) in PCL5e emulation.
PCL TRAY 0 ID	1 4* -59	Sets the # to specify Tray 0 (multi purpose tray) for the media source command (ESC & I # H) in PCL5e emulation. Displays only when the Multi purpose feeder tray is installed.
PCL TRAY 1 ID	1* -59	Sets the # to specify Tray 1 for the media source command (ESC & I # H) in PCL5e emulation.

SYSTEM ADJUSTMENT MENU

Item	Default	Remarks
PCL TRAY 2 ID	1- 5* -59	Sets the # to specify Tray 2 for the media source command (ESC & I # H) in PCL5e emulation. Displays only when Tray 2 is installed.
PLACE PG	CENTER* LEFT	Sets the paper position. This is the reference base used in printing paper narrower than Edit Size from the manual feeder without specifying Paper Size. The paper's base point in LANDSCAPE is not the point set in the MENU, rather the lower left position to which a print image has been horizontally shifted.
HEX DUMP	EXECUTE	Prints in hexadecimal dump. Turn OFF the power to end hexadecimal dump printing.

Maintenance menu

This menu provides access to various printer maintenance functions.

MAINTENANCE MENU

Item	Default	Remarks
EEPROM RESET	EXECUTE	Reset EEPROM.
DRUM COUNT RESET	EXECUTE	Reset Drum Count.
POWER SAVE	ENABLE* DISABLE	Sets Power Save Mode. When enabled, time to change to Power Save mode is changed in POWER SAVE DELAY TIME in the SYS CONF MENU.

MAINTENANCE MENU

Item	Default	Remarks
SETTING	0 +1 +2 -2 -1	Used for micro adjustment when very visible faded print or light specks appear in print quality. Decrease value: light specks or streaks or snow flake-like print results in high-density print areas. Increase value: if faded print occurs.
DARKNESS	0 +1 +2 -2 -1	Sets print darkness.
CLEANING PAGE	PRINT	Print drum cleaning page.

Usage menu

This menu is for information only, and provides an indication of total usage of the printer and the expected life left in its consumable items. This is particularly useful if you do not have a full set of replacement consumables to hand and you need to know how soon you will need them.

USAGE MENU

Item	Default	Remarks
DRUM LIFE	REMAINING %	Shows the image drum consumption.
TONER	7K= % 3K= %	Shows the installed toner cartridge capacity and the remaining toner level. 7K = High capacity cartridge (B4600 only) 3k = Standard cartridge

Printing menu settings

Models B4500, 4600

Current menu settings can be confirmed by printing a Menu Map.

1. Press the **Online** button to return the printer to offline status.
2. Press the **Menu** button until the INFORMATION MENU displays.
3. Press the **Item+** button until the display prompts you to print the menu map.
4. Press the **Select** button to print the menu map.
5. Press the **Online** button to return the printer to online status when the menu map is printed.

Model B4400

1. Open the Status Monitor
2. Click the Printer Setup Tab.
3. Click the Open Configuration button.
4. Click the Information Menu.
5. Click Print Menu Map.

NOTE: You can also print the Menu Map on the B4400 by turning the printer off line and pressing and holding the OnLine button for at least two seconds before releasing.

Changing the Printer Menu Language

Model B4400

1. Open the on-line Status Monitor.
2. Click the Printer Setup Tab.
3. Click Open Configuration.
4. Double-click the System Configuration Menu.
5. Click Status Display Language.
6. Select a language from the pull down menu.
7. Click Printer>Reload Settings.

Models B4500, B4600

Change the Menu Language using the Printer Display Language Utility on the Software Installation CD. Run the CD, selecting the language you want. Select Optional Utilities>Change the Printer Display Language. Follow the on-screen instructions. When the operator panel displays DL MSG Success, turn the printer Off/On to reset.

Network Connection Setup via Windows

Requirements:

- Windows Server 2003 with Network interface for Ethernet
- Windows XP
- Windows ME/98
- Windows 2000
- Windows NT 4.0

NOTE: For information specific to a network installation, see the Network User Guide on the CD-ROM supplied with your printer. Click the Documentation/Network User's Guide buttons in the Menu Installer.

Checking the Ethernet Address

The Ethernet address (MAC address) is displayed in the Network Information printout. Print the Menu Map:

B4500/4600

1. Press the MENU+ button, INFO MENU displays.
2. Press ITEM, MENU MAP PRINT displays.
3. Press SELECT.
4. The Menu map prints. The Mac Address appears under general Information.

Network Information

System Information

Serial Number	BETA 080
Asset Number	
System Contact	
System Name	OLB410B6
System Location	

General Information

Network Function Name	OkULAN 8150e	Firmware Version	12.66
IP Address	*****	OkWebRemote	10.14
MAC Address	008087B410B6		
HUB Link Setting	Auto Negotiation		
HUB Link Status	OK (100BASE-TX Full)		
Frame Type	Automatic		
Network Status	Unicast Packets Received	9810	
	Packets Transmitted	11093	
	Total Packets Received	31166	
	Unsendable Packets	0	
	Bad Packets Received	0	
TCP/IP Protocol	Enable		
NetBEUI Protocol	Enable		
NetWare Protocol	Enable		

B4400

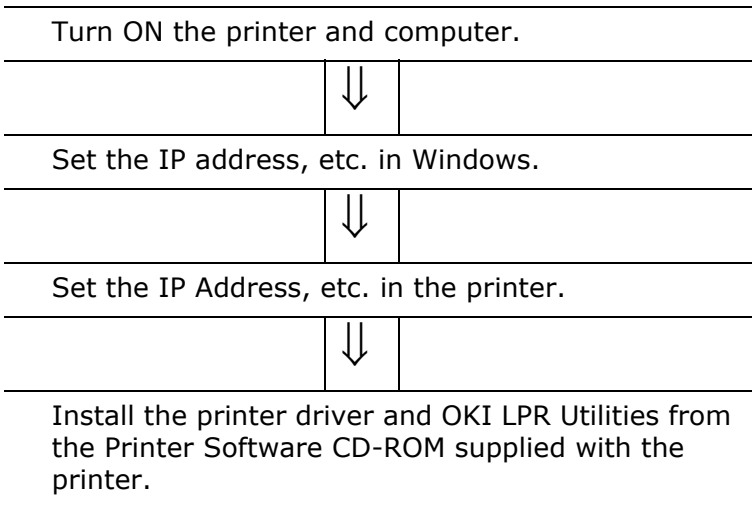
To print Network Information:

1. Turn the printer ON.
2. Press and hold the TEST button on the print server located on the back of the printer for 5 seconds.
3. The Network Information sheets print.

Connecting a Cable

1. Turn off the printer and Computer.
2. Insert an Ethernet cable into the network interface connector on the printer.
3. Insert the Ethernet cable into a hub.

Setup Flow



Setup for Windows

NOTE: The following setup instructions are for Windows XP/2000/Server 2003. The setup procedure for Windows ME/98/NT4.0 are similar.

An IP address must be set in the computer and the printer when the printer is used on a network. If there is no DHCP,

BOOTP or RARP server in the network, the IP address must be set manually. Also, a company network administrator may specify an IP address which must be set manually.

The printer supports Network Plug & Play. When all connected computers are Windows XP, 2000 or Server 2003, or connected routers support Network Plug & Play, the IP address is automatically set on the network.

1. Turn ON the printer and computer.
2. Set the IP Address, etc. in Windows.

NOTE: Proceed to Step 3 if the IP address has been already set or has been obtained automatically.

1. Start Windows.
2. Choose Start>Settings>Network Connection for Windows XP. (Select Start>Control Panel>Network Connection for Windows Server 2003. Select Start>Settings>Network and Dialup Connection for Windows 2000.)
3. Double click Local Area Connection and click Properties.
4. Select Internet Protocol (TCP/IP) and click Properties.
5. Input the IP address, subnet mask, default gateway and DNS server and click OK.
6. Close.

NOTE: IP Address is not necessary if obtained automatically. If default gateway or DNS server is not used, input is not necessary.

3. Set the IP address, etc. in the printer.
 1. Turn on the printer.
 2. Press the Menu button several time to display NETWORK.
 3. Press the Item+ or Item- several times to display TCP/IP ENABLE.
 4. Press the Select to set TCP/ENABLE (an * appears to the right).
 5. Press Item+ or Item- to indicate IP1/4.
 6. Press Value+ or Value- to display the first digit value of the IP address.
 7. Press Select to add * to the value.

- 8.** Repeat steps 3 to 5 to set IP 2/4 to IP 4/4, MASK 1/4 to Mask 4/4, (Subnet mask), Gate 1/4 to Gate 4/4, (Gateway address).
- 9.** Press On-line.
- 4.** Install the printer driver.
 - 1.** Insert the CD-ROM into your CD-ROM drive. It will autorun.
 - 2.** Select the language.
 - 3.** Accept the License Agreement.
 - 4.** Select Driver Setup from the menu bar.
 - 5.** Click Install Driver.
(Select Install Driver and Status Monitor if your printer is a B4400).
 - 6.** Select Network Printer.
 - 7.** Select TCP/IP protocol.
 - 8.** Enter the IP address that was entered in the printer.
 - 9.** Select Subnet to be searched and click Next when the IP address of the printer is automatically obtained or the IP address can not be found.
 - 10.** Select the OKI printer model and click Next if you entered an IP address in step 9.
 - 11.** When Subnet to be searched is selected in Step 9, a searched printer list is displayed. Then select your OKI printer and click Next.
 - 12.** Enter a printer name, check Set the default printer and click Next.
 - 13.** Select Share or Do Not share the printer. Click Next.
 - 14.** Click Continue.
 - 15.** The printer driver, standard TCP/IP, and Network Extension are installed.
 - 16.** If Restart is shown, click Finish and restart the computer. The setup is complete when a printer icon displays in the Printer folder.

Change the Printer Display Language (Models B4500, B4600)

The default language for the printer operator panel display is English. To choose an alternate language for the printer display:

1. First make sure the printer driver is installed before using this utility.
2. Load the install CD and select the language you want.
3. Select Optional Utilities.
4. Click Change the Printer Display.
5. Follow the on-screen instructions.
6. When the operator panel displays DL MSG Success, turn the printer Off and On to reset.

Enable Printer Accessories

NOTE: To print from Tray 2 or the Multi-Purpose tray, you must select these devices in the device options tab in the printer driver.

1. Select Start>Printer and FAX for Windows Server 2003. Select Start>Setting (Printers) for Windows 2000/NT4.0/98.
2. Right click the OKI printer icon.
3. Click Properties>Device options tab.
4. Check the options you have installed.
5. Click Apply. Click OK.

Uninstalling the printer driver

1. Select Start>Control Panel>Printers. Select Start>Printer and FAX for Windows Server 2003. Select Start>Setting (Printers) for Windows 2000/NT4.0/98.
2. Right click the OKI printer icon.
3. Follow the on-screen instructions and select Delete.

NOTE: Steps 4 and 5 are from Windows XP/2000/Server 2003.

4. Select File>Server Properties in the Printer (and FAX) folder.
5. Select the model name at the Drivers tab and click Delete.

Setup for Windows via USB Connection

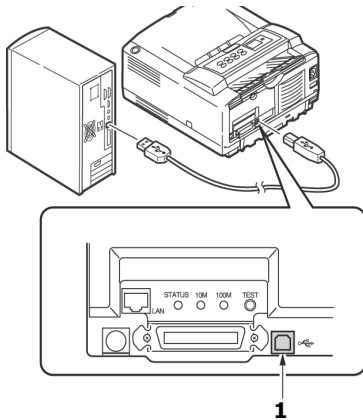
Requirements:

- Windows Server 2003
- Windows XP
- Windows ME/98
- Windows 2000

Connecting a Cable

A printer cable is not supplied with the printer. You will need a USB 2.0 cable.

1. Turn off the printer and Computer.



2. Insert a USB cable into the USB interface connector (1) of the printer.
3. Insert the other end of the cable into the USB connector of the computer.

Setup

NOTE: Install the printer driver before connecting the USB cable to the printer.

4. Turn the printer OFF.
 1. Insert the CD in the CD-ROM drive. The CD will autorun.
 2. Select the language.
 3. Accept the license agreement.

4. Click Install Driver (and Status Monitor for the B4400)
5. Select local printer.
6. Follow the on-screen instructions.
7. When prompted, connect the USB cable and switch the printer ON.

Change the Printer Display Language (Models B4500, B4600)

The default language for the printer operator panel display is English. To choose an alternate language for the printer display:

1. First make sure the printer driver is installed before using this utility.
2. Load the install CD and select the language you want.
3. Select Optional Utilities.
4. Click Change the Printer Display.
5. Follow the on-screen instructions.'
6. When the operator panel displays DL MSG Success, turn the printer Off and On to reset.

Enable Printer Accessories

NOTE: To print from Tray 2 or the Multi-Purpose tray, you must select these devices in the device options tab in the printer driver.

1. Select Start>Printer and FAX for Windows Server 2003. Select Start>Setting (Printers) for Windows 2000/NT4.0/98.
2. Right click the OKI printer icon.
3. Click Properties>Device options tab.
4. Check the options you have installed.
5. Click Apply. Click OK.

Troubleshooting Setup Failure via USB

Symptom	Resolution
Cannot setup in Windows 95/NT.40	USB connection is available for Windows Me/98/2000/XP/Server 2003 only.
Windows Me/98 upgraded from Windows 95/3.1 is used.	No guarantee of proper operation. Use a computer with a clean installation of Windows Me/98.
The computer does not support USB interface.	Confirm that USB controller is shown in the device manager.
Interface is set to DISABLE.	B4500/4600: Set to ENABLE in the printer menu. See "USB menu" on page 41. B4400: Open the Status Monitor. On the Printer Setup Tab, click the Open Configuration button. Click USB Menu, USB Enable.
The USB cable is disconnected.	Connect the USB cable.
A USB hub is used.	Connect the printer directly to the computer.

Setup for Windows via Parallel Connection

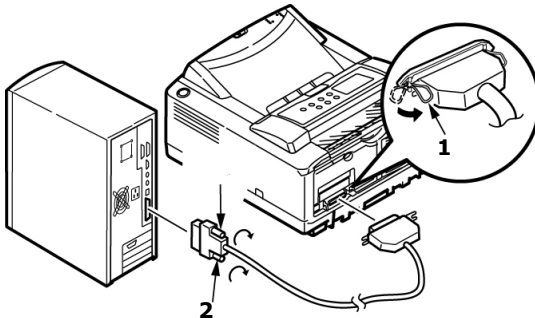
Requirements:

- Windows Server 2003
- Windows XP
- Windows ME/98
- Windows 2000
- Windows NT 4.0

Connecting a Cable

A printer cable is not supplied with the printer. You will need a Parallel IEEEstd1284-1994 compliant bi-directional parallel cable.

1. Turn off the printer and Computer.



2. Insert a parallel cable into the parallel interface connector on the printer and press the clips (1) against the connector to secure it.
3. Insert the other end of the parallel cable into the interface connector of the computer and secure it with the screws (2).

Setup

1. Turn on the printer.
2. Insert the CD in the CD-ROM drive. The CD will autorun.
3. Select the language.
4. Accept the license agreement.

5. Click Install Driver (and Status Monitor for the B4400)
6. Select local printer.
7. Follow the on-screen instructions.

Change the Printer Display Language (Models B4500, B4600)

The default language for the printer operator panel display is English. To choose an alternate language for the printer display:

1. First make sure the printer driver is installed before using this utility.
2. Load the install CD and select the language you want.
3. Select Optional Utilities.
4. Click Change the Printer Display.
5. Follow the on-screen instructions.'
6. When the operator panel displays DL MSG Success, turn the printer Off and On to reset.

Enable Printer Accessories

NOTE: To print from Tray 2 or the Multi-Purpose tray, you must select these devices in the device options tab in the printer driver.

1. Select Start>Printer and FAX for Windows Server 2003. Select Start>Setting (Printers) for Windows 2000/NT4.0/98.
2. Right click the OKI printer icon.
3. Click Properties>Device options tab.
4. Check the options you have installed.
5. Click Apply. Click OK.

Uninstalling the printer driver

1. Select Start>Control Panel>Printers. Select Start>Printer and FAX for Windows Server 2003. Select Start>Setting (Printers) for Windows 2000/NT4.0/Me/98.
2. Right click the OKI printer icon.
3. Follow the on-screen instructions and select Delete.

4. Steps 4 and 5 are fro Windows XP/2000/Server 2003.
5. Select File>Server Properties in the Printer (and FAX) folder.
6. Select the model name at the Drivers tab and click Delete.

Troubleshooting Setup Failure via Parallel Connection

Symptom	Resolution
The computer does not support bidirectional parallel interface.	Use a computer supporting bi-directional parallel interface.
The parallel cable may not match the port.	Use a IEEEstd1284-1994 compliant bidirectional parallel interface cable.
Interface is set to DISABLE.	B4500/B4600: Set Centronics to ENABLE on the printer menu. See page "PARALLEL MENU" on page 40. B4400: Open the Status Monitor. On the Printer Setup Tab, click the Open Configuration button. Click Parallel Menu, Parallel Enable.
A parallel cable is disconnected.	Connect the parallel cable

Setup for Macintosh With USB Connection

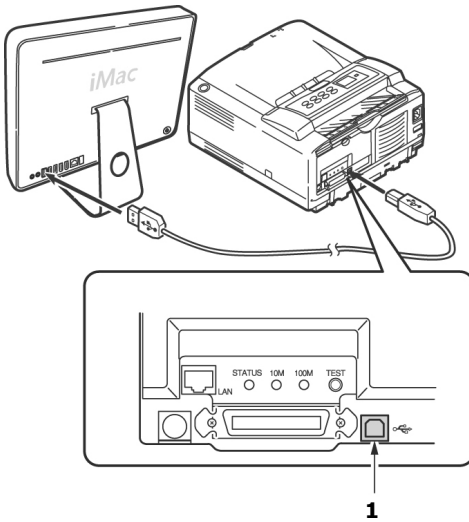
Requirements:

A Macintosh computer Rev 8.1 to 9.2.2 and Mac OS X.

Connecting a Cable

A printer cable is not supplied with the printer. You will need a USB 2.0 cable.

1. Turn off the Macintosh and the printer.



2. Insert a USB cable into the USB interface connector (1) of the printer.
3. Insert the other end of the cable into the USB interface connector of the Macintosh.

Setup

1. Turn ON the printer.
2. Insert the CD in the CD-ROM drive.
3. Click the OKI CD-ROM icon.
4. Open the Driver folder.

- 5.** Double-click Installer for Mac OS.
- 6.** Select the language.
- 7.** Accept the license agreement.
- 8.** Follow the on-screen instructions.

Select a printer:

- 9.** Open the Chooser on the Apple Menu.
- 10.** Click the Oki Printer icon.
- 11.** Select your printer.
- 12.** Close Chooser. A Desktop Printer icon is displayed on the desktop.

Setup for Mac OS X via Network Connection

Requirements:

To print from Mac OS X, three methods are available:

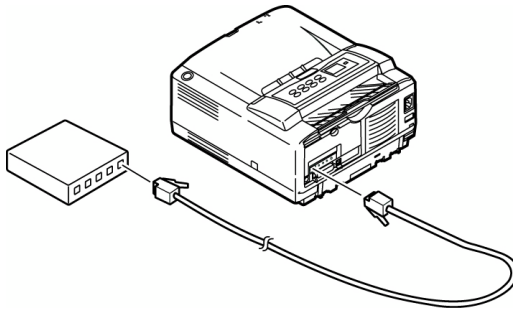
- Ether Talk
- TCP/IP
- Bonjour (Rendezvous for Mac OS x 10.3 or earlier)

Connecting a Cable

An internet cable and a hub is not supplied with the printer. You will need a internet cable and a hub (Category 5, twisted-pair cable and straight type) separately.



1. Turn OFF the Macintosh and the printer.
2. Connect the printer to the Network.



Setup

EtherTalk Protocol

1. Turn ON the printer.
2. Start the Mac.

3. Choose System Environment setting>Networks.
4. Select Views>Network port Setting and make sure Internal Ethernet is checked.
5. Choose the Views>Internal Ethernet. On the AppleTalk tab, make sure AppleTalk is checked.

Install the Printer Driver:

1. Insert the supplied CD-ROM in the Macintosh CD-ROM drive.
2. Open the Driver folder.
3. Double-click Installer for Mac OS X.
4. Input the administrator name and click OK.
5. Follow the onscreen instructions to install.

Add the Printer:

1. On the hard disk select Applications>Utilities folder, and double-click Printer Setting Utility. (For Mac OS X 10.2 or earlier, select the Print Center.
2. Click Add (Add the printer, for Mac OS X 10.1.5 or earlier).
3. Click Other Printers.
4. Select AppleTalk.
5. Select the printer name and click Add.
6. Make sure that the printer name is shown in the Printer List.
7. Close the Printer Setting Utility.

TCP/IP Protocol

1. Turn on the printer.
2. Start the Macintosh.
3. Choose System Environment>Network.
4. Select Views>Network port Setting and make sure Internal Ethernet is checked.
5. Select Views>Internal Ethernet on the TCP/IP tab. Input the IP address, subnet mask, etc. and click Apply now.

NOTE: Select Refer to DHCP Server if IP Address is automatically obtained from the DHCP server.

Set the IP Address in the printer:

NOTE: Proceed to Install the Printer Driver if the IP address has been set in Windows or obtained automatically.

1. Turn on the printer.
2. Press the Menu button several time to display NETWORK.
3. Press the Item+ or Item- several times to display TCP/IP ENABLE.
4. Press the Select to set TCP/ENABLE (an * appears to the right).
5. Press Item+ or Item- to indicate IP1/4.
6. Press Value+ or Value- to display the first digit value of the IP address.
7. Press Select to add * to the value.
8. Repeat steps 3 to 5 to set IP 2/4 to IP 4/4, MASK 1/4 to Mask 4/4, (Subnet mask), Gate 1/4 to Gate 4/4, (Gateway address).
9. Press On-line.

Install the Printer Driver:

1. Insert the supplied CD-ROM in the Macintosh CD-ROM drive.
2. Open the Driver folder.
3. Double-click Installer for Mac OS X.
4. Input the administrator name and click OK.
5. Follow the onscreen instructions to install.

Add the Printer:

1. On the hard disk select Applications>Utilities folder, and double-click Printer Setting Utility. (For Mac OS X 10.2 or earlier, select the Print Center).
2. Click Add (Add the printer, for Mac OS X 10.1.5 or earlier).
3. Click Other Printers.
4. Select OKI TCP/IP.
5. Select the printer name and click Add.
6. Make sure that the printer name is shown in the Printer List.
7. Close the Printer Setting Utility.

Bonjour (Rendezvous) Protocol

1. Turn on the printer.
2. Start the Macintosh.
3. Choose System Environment>Network.
4. Select Views>Network port Setting.
5. Select Views>Network Port Setting. (Network Port in operation for Mac OS X 10.1.5 or earlier). Make sure Internal Ethernet is checked.

Install the Printer Driver:

1. Insert the supplied CD-ROM in the Macintosh CD-ROM drive.
2. Open the Driver folder.
3. Double-click Installer for Mac OS X.
4. Input the administrator name and click OK.
5. Follow the onscreen instructions to install.

Add the Printer:

6. On the hard disk select Applications>Utilities folder, and double-click Printer Setting Utility. (For Mac OS X 10.2 or earlier, select the Print Center.
7. Click Add (Add the printer, for Mac OS X 10.1.5 or earlier).
8. Select Rendezvous for Mac OS X 10.3 or earlier.
9. Select the printer name in Printer Types, and select a printer name to be used for Mac OS X 10.3 or earlier. Click Add.

A printer name is "OKI B4500n" plus the last 6 digits of the MAC address.

10. Make sure that the printer name is shown in the Printer List.
11. Close the Printer Setting Utility.

Setup for Mac OS X via USB Connection

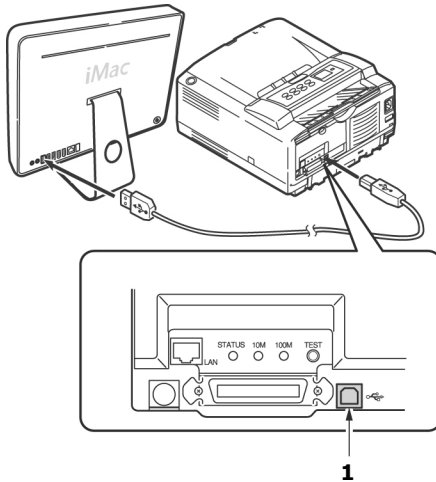
Requirements:

A Macintosh computer Rev 8.1 to 9.2.2 and Mac OS X.

Connecting a Cable

A printer cable is not supplied with the printer. You will need a USB 2.0 cable.

1. Turn off the Macintosh and the printer.



2. Insert a USB cable into the USB interface connector (1) of the printer.
3. Insert the other end of the cable into the USB interface connector of the Macintosh.

Setup

1. Turn ON the printer.
2. Insert the CD in the CD-ROM drive.
3. Click the OKI CD-ROM icon.
4. Open the Driver folder.
5. Double-click Installer for Mac OS X in the Driver folder.
6. Input administrator's name and click OK.

7. Follow the on-screen instructions to install.

Setup in the Printer Setting Utility

- 8.** Select Applications on the hard disk Utilities folder, and double-click Printer Setting Utility in the folder (double-click Printer Center in the Utilities folder of Applications for Mac OS x 10.2 or earlier version).
- 9.** Click Add (Add the printer for Mac OSx 10.2 or earlier version).
- 10.** Click Add at No available Printer screen when a new printer is added.
- 11.** When a printer name is displayed, select it and click Delete.
- 12.** Click Other Printers.
- 13.** Select OKI USB. Select USB for Mac OS 10.1.5 or earlier version.
- 14.** Select OKI Data USB Printer displayed in Types.
- 15.** Check that the printer name added in Printer List is displayed, and close Printer Setting Utilities.

Paper recommendations

For guidance on the media you can use with your printer, which input tray and which ejection method to use, see the section entitled "Paper and tray information" in the "Specifications" chapter.

Paper and envelope types

We recommends the following guidelines when selecting paper and envelopes for use in your printer:

- Paper and envelopes should be stored flat and away from moisture, direct sunlight and heat sources.
- Use a smooth finished paper such as copier or laser type paper with a Sheffield (smoothness) rating of 250 or less. If in doubt, please ask your paper supplier.
- Use envelopes designed for use in laser type printers.
- The use of heavily laid or textured paper will seriously affect the life of the image drum.
- Do not use very smooth, shiny/glossy paper.
- Do not use heavily embossed letterhead paper.
- Avoid printing on both sides and putting paper through the printer twice.
- Avoid using paper with perforations, cut-outs and ragged edges.
- Do not use envelopes with windows or metal clasps.
- Do not use envelopes with self sealing flaps.
- Avoid using damaged or curled envelopes.

Transparencies and adhesive labels

The manufacturer of this printer recommends the following guidelines when selecting transparencies and adhesive labels for use in your printer:

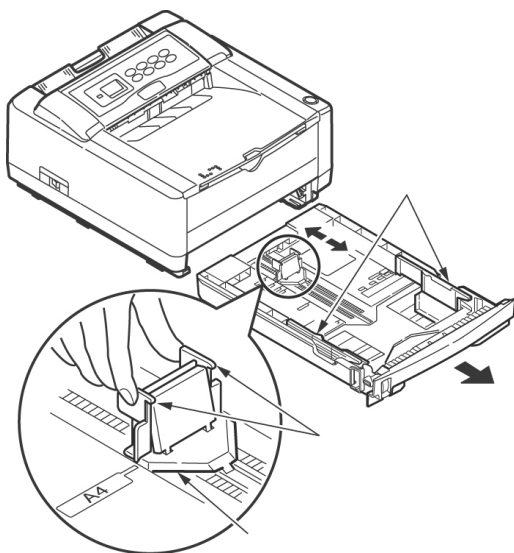
- Always use manual feed.
- Always use rear output.
- Media must be designed for use in laser printers or photocopiers and must be able to withstand 200°C (390°F) for 0.1 sec.

- Do not use media designed for use in color laser printers and photocopiers
- Labels should cover entire carrier sheet.
- Carrier sheet or adhesive **must not** be exposed to any part of the printer.

Installing paper

NOTE: If you are topping up the paper in a paper tray, it is recommended that you remove the remaining paper from the tray first then add the new paper stock followed by the paper you removed. This ensures that the oldest paper is used first to help prevent paper jams.

1. Remove the paper tray from the bottom of the printer and place plain paper in the tray, keeping the level of the paper in the tray below the guide arrowheads shown on the paper guides (1)



NOTE: Load letterhead paper face down and top edge towards the front of the paper tray.

NOTE: If you are installing legal size paper, open out the paper tray extender located at the rear of the paper tray.

2. Adjust the rear paper support (2) to the size of paper you are using by gripping the lugs (3), tilting and sliding the support forwards or backwards as necessary
3. Adjust the paper guides (1). It is important to adjust the paper guides correctly to ensure that the paper is not skewed in the print process. Paper jams may occur if this operation is not carried out correctly.
4. Replace the tray in the printer. The paper level indicator (4) provides a visual indication of how much paper is left in the tray.

NOTE: If you have the optional second paper tray (Tray 2) and you are printing from the first (upper) tray (Tray 1), you can pull out the second (lower) tray to reload it. However, if printing from the second (lower) tray, do not pull out the first (upper) tray as this will result in a paper jam.

Face up and face down printing

For face down printing, make sure the rear paper exit tray is closed (the paper exits from the top of the printer). The paper exit bin on the top of the printer stacks printed pages face down, capacity 150 sheets of 20 lb. paper. Pages printed in reading order (page 1 first) will be sorted in reading order (last page on top, facing down).

For face up printing, make sure the face up rear paper exit tray is open and the paper guide is extended if required. In this condition, paper will exit via this path, regardless of driver settings. Paper is stacked in reverse order, capacity 50 sheets of 20 lb. paper.

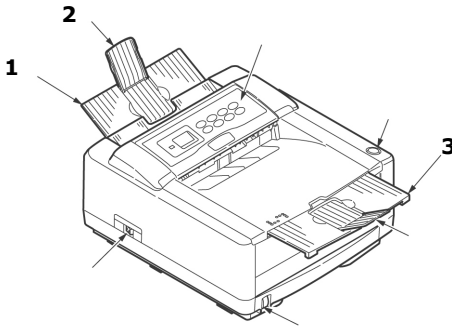
Always use this tray and the manual feed tray for heavyweight stocks to reduce the possibility of paper jams.

Automatic feed sequence

Ensure that the Autotray function is set to ON (default) when you have either or both optional feed trays installed. In this way, if a tray runs out of paper, automatic feed will take place in the order Tray 1, Tray 2 (if installed), provided that these trays are set up for identical media.

Printing envelopes

1. Pull out the rear paper exit tray (1) until it locks and lift out the paper guide (2).



2. Pull down the manual feed tray (3) and adjust the paper guides to the width of the envelope.
3. Insert the envelope, flap down and to the left, until the printer grips it.
4. Set envelope size and landscape orientation in your software, then issue the print command.

Heavyweight paper or cardstock

The normal paper path from a main paper tray to the top output stack involves two complete U-turns. This may sometimes cause very heavyweight paper or cardstock to jam or misfeed.

Use the manual feed (multi-purpose) tray to feed this type of paper and the rear paper exit to collect printed output. This gives a nearly straight paper path through the machine and may prove more reliable in this type of application.

Paper feed, size and media setting

The process used to fuse (fix) the printed image to the paper involves a mixture of pressure and heat. Too much heat will cause lightweight paper to crease or curl, and corrugations in transparencies. Too little heat will cause the image not to fuse fully into heavyweight paper.

NOTE: Although media properties can be set in the printer driver for particular jobs, when filling a tray with media it is

recommended that you manually set the printer to match the media as described here.

B4400

The print quality for different types of paper is adjusted by changing the media type as follows:

1. Start the **Status Monitor**.
2. Click on [Printer Setup] tab - [Printer Menu] button - [Paper] tab. Click on the button for the paper tray being used. Adjust the media type to the required setting and, if necessary, the paper size to the size of the paper being used.
3. Click on the [Apply] button, [Close] button then [OK] button to set the printer to the new media type and printing quality.

Printing transparencies

When printing transparencies, the manual feed must be used and the media type changed to transparencies as follows:

Damage to the printer may occur if the incorrect setting is used when printing transparencies.

1. Open the manual feed on the printer and place the transparency face up between the paper guides.
2. Adjust the paper guides to the width of the transparency.
3. Start the **Status Monitor**.
4. Click on [Printer Setup] tab - [Printer Menu] button - [Paper tab] - [Manual Feed] button. Adjust the media type to Transparency and the paper size to the size of the transparency being used.
5. Click on the [Apply] button, [Close] button then [OK] button to set the printer for transparencies.

NOTE: Remember to reset the printer for normal paper after printing transparencies.

B4500, B4600

Using the control panel on your printer, you can choose:

- which paper to use
- the size of the paper you wish to use

- the weight of the paper (thickness)
- the type of paper

NOTE:

1. If the settings in the printer differ from those selected on your computer, the printer will not print and the LCD will display an error message.
2. The following printer settings are given as a guide only. Some software applications require the paper feed, size and media settings to be selected from within the application (page setup).
3. Although media properties can be set in the printer driver for particular jobs, it is recommended that when filling a tray with media you manually set the printer to match the media as described here.

Paper feed selection

The paper feed, paper size, paper weight and media type can be set manually on the printer using the control panel as follows.

1. Press the **Online** button to return the printer to offline status.
2. Press the **Menu** button repeatedly until PRINT MENU is displayed, then press the **Select** button.
3. Press the **Item** button until the required paper feed is displayed.
4. Press the **Select** button. A plus (+) appears next to the selected paper feed.

NOTE: When the AUTO TRAY SWITCH is set to ON and more than one paper tray is installed, paper feed automatically switches to the next available paper tray, providing non-stop printing.

Paper size

Set the paper size as follows.

NOTE:

1. When using paper trays, standard paper sizes are recognized automatically with CASSETTE SIZE (default setting) selected. Paper size need only be set for custom paper sizes.

2. When using the manual feed tray, the paper size has to be selected.

1. Press the Online button to return the printer to offline status.
2. Press the **Menu** button until PRINT MENU is displayed, then press the Select button.
3. Press either **Item (+)** or **(-)** button repeatedly until EDIT SIZE is displayed.
4. Press either **Value (+)** or **(-)** button until the required paper size is displayed, then press the **Select** button. A plus (+) appears next to the selected paper size.
5. Press the **Online** button to return the printer to ONLINE status.
6. Select the correct paper settings in the printer driver before printing the file.

Specifying Media type and weight

You can set media weight in the Printer Menu [Media Weight] using the Operator Panel (B4500, B4600). You can also set values in the printer driver (B4400, B4500, B4600).

NOTE: Values set in the printer driver take priority over values set from the operator panel.

This table defines the setting values of media weight and type.

Media Types	Weight	Operator Panel/ Printer Driver
Regular paper	Ream weight 16-19 lb. 55-64kg (64-74kg/m ²)	LIGHT
	Ream weight 18-19 lb. 55-64kg (64-74g/m ²)	MEDIUM LIGHT
	Ream weight 20-23 lb. 65-75kg (75-104g/m ²)	MEDIUM
	Ream weight 24-27 lb. 76-89kg (88-104g/m ²) (<i>feed from MP Tray, rear exit only</i>)	MEDIUM HEAVY
	Ream weight 28-32 lb. 90-103 kg (105-120g/m ²)	HEAVY
Postcard	(<i>Feed from MP Tray, Rear exit only</i>)	HEAVY
Label		LABELS

Media Types	Weight	Operator Panel/ Printer Driver
Transparency		Transparency

CAUTION! If media type or media weight are not correctly set, print quality deteriorates and the fuser roller may be damaged.

Set media type and weight on the printer as follows:

1. Press the Online button to return the printer to off-line status.
2. Press the Menu button until MEDIA MENU is displayed, then press the Select button.
3. Press the Item **(+)** or **(-)** button until MEDIA TYPE or MEDIA WEIGHT for the required tray is displayed.
4. Press the Value **(+)** or **(-)** button until the required paper type or weight is displayed, then press the **Select** button. A plus (+) appears next to the selected paper type or weight.
5. Press the Online button to return the printer back to online status.

Select the correct paper settings in the printer driver before printing the file.

Interfaces

Your printer is equipped with a selection of data interfaces:

- 1. Parallel** – For direct connection to a PC. This port requires a bi-directional (IEEE 1384 compliant) parallel cable.
- 2. USB** – For connection to a PC running Windows 98 or above (not Windows 95 upgraded to Windows 98) or Macintosh. This port requires a cable conforming to USB version 2.0 or above.
- 3.** The operation of a printer is not assured if a USB-compatible device is connected concurrently with other USB-compatible machines.
- 4.** When connecting multiple printers of the same type, they appear as ***** (1), ***** (2), ***** (3), etc. These numbers depend on the order of connecting or turning on each printer.
- 5. Serial** – for direct connection to a device that uses serial printing (available as an option). *Note: cannot be used with the Ethernet card.*
- 6. Ethernet** – For network cable connection; standard on network models. (available as an option on non-network models)
- 7.** If you are connecting your printer directly to a standalone computer proceed to the chapter entitled "Printer Drivers."

If your printer is to be installed as a network printer, please refer to the User's Guide for the network interface card for further details on how to configure the network connection before installing the printer drivers.

NOTE: Administrator's authority is required when installing a network connection.

Printer Drivers

This chapter describes how to install a printer driver on two types of operating system – Windows, and Macintosh.

The printer drivers are all contained on the printer driver CD-ROM. Please refer to the readme file on this CD for the latest information on printer driver installation.

NOTE: For information specific to a network installation, see the Network User Guide on the CD-ROM supplied with your printer. Click the Documentation/Network User's Guide buttons in the Menu Installer.

NOTE: For step by step instructions, see the Software Installation Guide included with your printer.

Windows operating systems

Install the printer driver using The Menu Installer on the CD-ROM included with your printer.

1. Insert the printer driver CD-ROM supplied with your printer into your CD-ROM drive. The CD will autorun. (If it doesn't, click [Start] - [Run] - [Browse]. Browse to your CD-ROM driver and double-click **Install.exe**, click **OK**.)
2. Select your language.
3. Select the printer model.
4. Accept the License Agreement.
5. The Installer screen appears.
6. Click Install Driver (B4400: Install Driver and Status Monitor).
7. Follow the on-screen prompts to complete your printer driver installation.

Installed options

Certain options may have been installed in your printer. For those that are installed, check that they appear enabled on the Menu Map (See "Confirming current settings" in "Operator Panels".)

Ensure that your options are set up in the printer driver(s) by making the appropriate settings on the Device Options tab

(PCL emulation) and/or Device Settings tab (PS emulation) described in the “Operation.” chapter.

Macintosh

Install the Driver

- 1.** Turn on the printer, then turn on the computer.
- 2.** Place the CD supplied with the printer in the CD-ROM drive.
- 3.** Double-click the CD icon that appears on the desktop.
- 4.** Open the MAC folder (OSX or OS9).
- 5.** Double-click your language.
- 6.** Double-click the OKI **Mac Installer** icon for your printer model. The Installer displays with the driver pre-selected.
- 7.** Select any utilities you want to install. Click Install.

Adding the Printer

- 1.** Run the Print Center or Print Setup Utility. Click Add.
- 2.** Click More Printers.
- 3.** Select OKI USB, OKI TCP/IP, or Rendezvous/Bonjour from the drop-down menu.
- 4.** If you are using USB, select OKI USB and disregard step 4.
- 5.** Enter the printer’s IP address.
- 6.** Select the printer model. Click Add.
- 7.** Quit the Print Center.

Operation

This chapter provides a broad outline of how to operate your printer from either a Windows or a Macintosh environment. In the Windows environment, PCL emulation is available on the B4400, B4500 and B4600 printer models. PS is available as an option on the B4500 and B4600 models.

Printer settings in Windows

NOTE: The illustrations in this guide relate to Windows 2000 PCL and PS emulations – other operating system windows may appear slightly different but the principles are the same.

The operator panel controlled menus and Status Monitor controlled menus (described in the chapter entitled “Operator panels”) provide access to many options.

The Windows printer driver also contains settings for many of these items. Where items in the printer driver are the same as those in the operator panel and Status Monitor menus, and you print documents from Windows, the settings in the Windows printer driver will override those settings in the operator panel and Status Monitor menus.

Printing preferences in Windows applications

When you choose to print your document from a Windows application program a Print dialogue box appears. This dialogue usually specifies the name of the printer on which you will print your document. Next to the printer name is a **Properties** button.

When you click **Properties**, a new window opens which contains a short list of the printer settings available in the driver, which you can choose for this document. The settings available from within your application are only those which you may want to change for specific applications or documents. Settings you change here will usually only last for as long as the particular application program is running.

PCL emulation

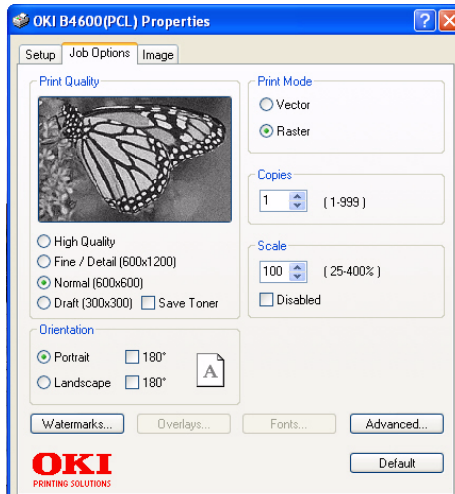
The tabs available are the **Setup Tab**, the **Job Options Tab** and the **Image Tab**.

Setup tab



1. Paper size should be the same as the page size of your document (unless you wish to scale the printout to fit another size), and should also be the same as the size of paper you will feed into the printer.
2. You can choose the source of the paper to feed, which may be Tray 1 (the standard paper tray), Manual Feed, or Tray 2 (if you have the optional second paper tray installed). You can also click on the appropriate part of the screen graphic to select your preferred tray.
3. If you select manual, the Weight selection box becomes visible. You can leave the setting at Printer Setting or select as required.
4. A variety of document finishing options can be selected, such as normal one page per sheet, or N-up (where N can be 2 or 4) for printing scaled down pages at more than one page per sheet.
5. If you have changed some printing preferences before and saved them as a set, you can recall them to avoid having to set them individually each time you need them.
6. A single on-screen button restores the default settings.

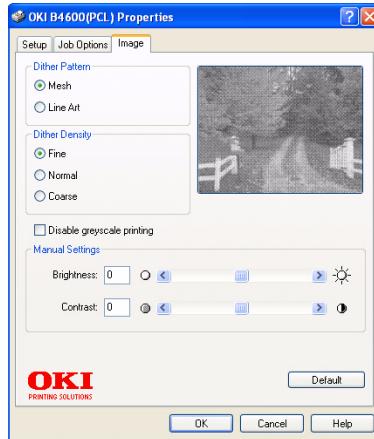
Job Options tab



1. The output resolution of the printed page can be set as follows.
 - The highest quality setting prints at 600 x 1200dpi. This option requires the most printer memory and takes the longest to print.
 - The normal setting prints at 600 x 600dpi and is adequate for all but the most discerning applications.
 - The fast setting prints at 300 x 300dpi and is suitable for draft documents, where print quality is less critical.
2. Page orientation can be set to either portrait (tall) or landscape (wide) or landscape rotated by 180 degrees.
3. You can print watermark text behind the main page image. This is useful for marking documents as draft, confidential, etc.
4. In Raster (bitmap) mode, processing of the page image is done in the computer leaving little processing for the printer to do, although the file size may be large. In Vector mode, file sizes may be smaller and so transmission over a network, for example, may be faster. These effects are more pronounced for graphics printing than for text printing.

5. You can set a degree of toner saving for particular print jobs.
6. You can select up to 999 copies to print consecutively, although you will need to reload the paper tray during such a long print run.
7. Your printed pages can be scaled to fit larger or smaller stationery.
8. A single on-screen button restores the default settings.

Image tab



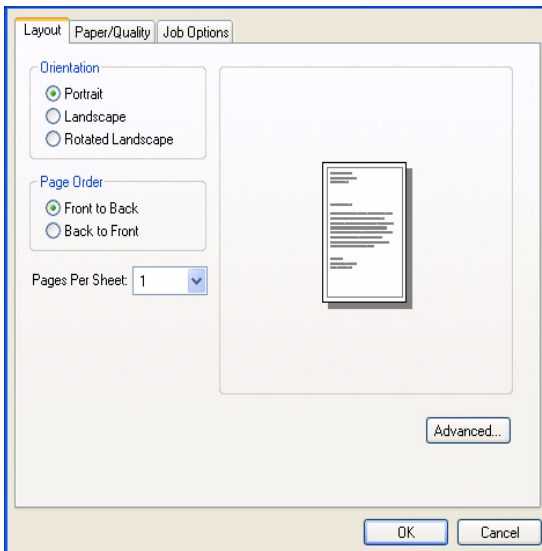
1. Dithering produces an intermediate greyscale by adjusting the combination of dots used in printing. Selecting a setting determines the degree of detail with which a graphics image will be printed. Mesh determines that a screen of dots is used for dithering while Line Art determines that an array of lines is used for dithering.
2. Select dithering texture by setting the size of dots used in the halftone screen.
3. Set this control to print greyscale effects in black without dithering.
4. You can manually adjust lightness (the higher the setting the lighter the print) and contrast (the higher the setting the greater the contrast).

PS emulation

For B4500 and B4600 printers with the PostScript 3 option installed.

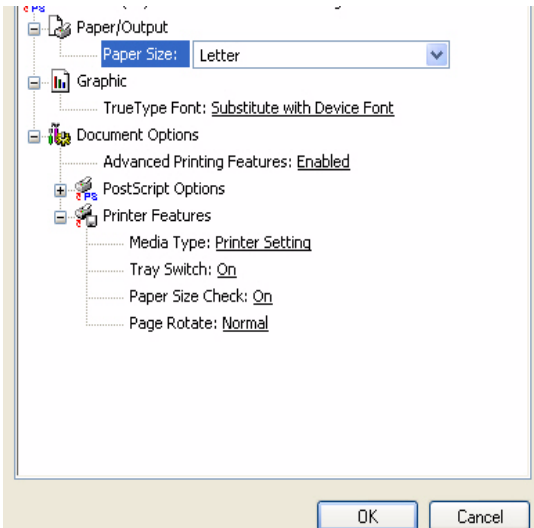
The tabs available are the Layout Tab, the Paper/Quality Tab and the Job Options Tab.

Layout tab



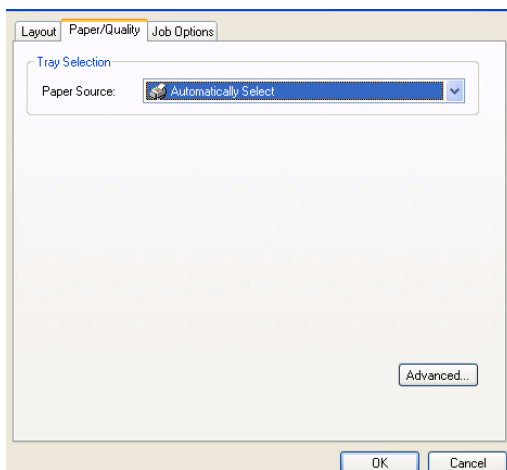
1. Page orientation can be set to portrait (tall), landscape (wide) or landscape rotated by 180 degrees.
2. Printed page order can be set as front to back or back to front of the document.
3. Set the number of pages to be printed on a single sheet.

4. Click the Advanced button to be able to set further document options as follows:



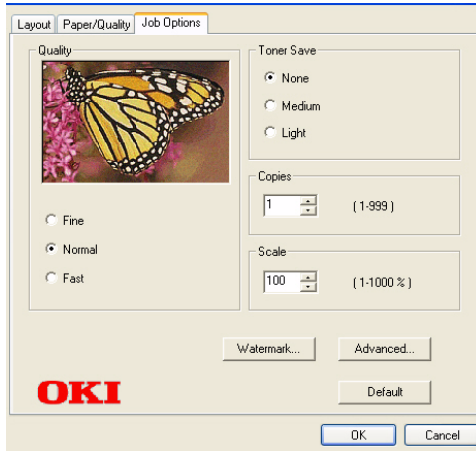
1. Select the required printed paper size.
2. You can substitute another font for TrueType Font.
3. You can set other document options as required, including PostScript options and printer features.

Paper/Quality tab



You can set the paper source or leave it as automatic selection and by using the Advanced button you have access to the same set of options as described above for the Layout Tab.

Job Options tab



1. The output resolution of the printed page can be set as follows.
 - The highest Fine setting prints at 600 x 1200dpi. This option requires the most printer memory and takes the longest to print.
 - The Normal setting prints at 600 x 600dpi and is adequate for all but the most discerning applications.
 - The Fast setting prints at 300 x 300dpi and is suitable for draft documents, where print quality is less critical.
2. You can print watermark text behind the main page image. This is useful for marking documents as draft, confidential, etc.
3. You can set a degree of toner saving for particular print jobs.
4. You can select up to 999 copies to print consecutively, although you will need to top up the paper tray during such a long print run.

5. Your printed pages can be scaled to fit larger or smaller stationery.
6. Using the Advanced button gives you access to the facility to set mirror image printing or negative image printing.
7. A single on-screen button restores the default settings.

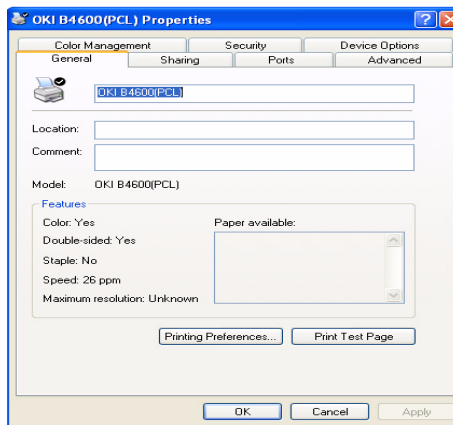
Setting from Windows Control Panel

When you open the driver properties window directly from Windows, rather than from within an application program, a somewhat more extensive range of settings is provided. Changes made here will generally affect all documents you print from Windows applications, and will be remembered from one Windows session to the next.

PCL emulation

The main tabs are the General Tab, Advanced Tab and Device Options Tab.

General tab



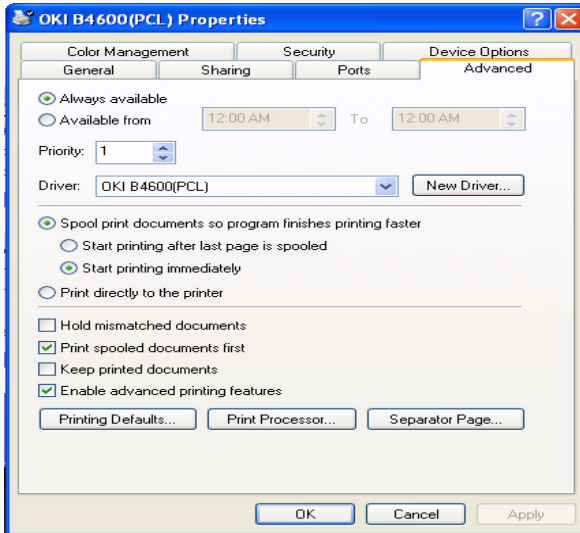
1. This area lists some of the main features of your printer, including optional items.
2. This button opens the same windows as described earlier for items which can be set from within application programs. Changes you make here, however, will

become the new default settings for all Windows applications.

3. This button prints a test page to ensure that your printer is working.

NOTE: The above features are provided by the Windows 2000 operating system and will vary with other operating systems.

Advanced tab



1. You can specify which times of day your printer will be available.
2. Indicates current priority, from 1 (lowest) to 99 (highest). Highest priority documents will print first.
3. Specifies that documents should be spooled (stored in a special print file) before being printed. The document is then printed in the background, allowing your application program to become available more quickly. Options follow:

This specifies that printing should not start until the last page has been spooled. If your application program needs a lot of time for further computation in the middle of printing, causing the print job to pause for more than a short period, the printer could prematurely assume that

the document has finished. Selecting this option would prevent that situation, but printing will be completed a little later, as the start is delayed.

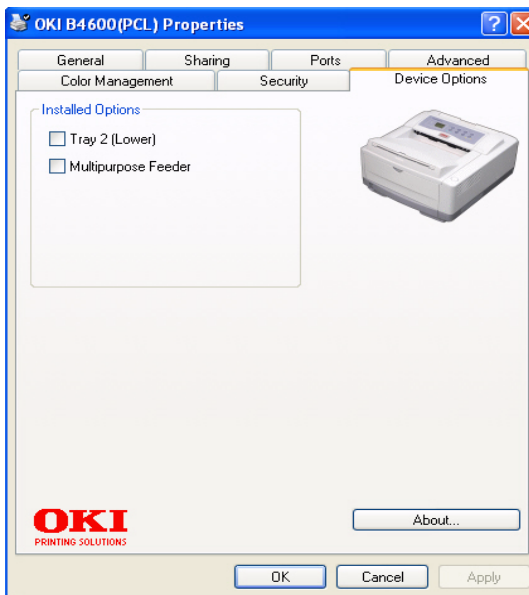
This is the opposite choice to the one above. Printing starts as soon as possible after the document begins spooling.

- 4.** This specifies that the document should not be spooled, but printed directly. Your application will not normally be ready for further use until the print job is complete. This requires less disk space on your computer, since there is no spool file.
- 5.** Directs the spooler to check the document setup and match it to the printer setup before sending the document to print. If a mismatch is detected, the document is held in the print queue and does not print until the printer setup is changed and the document restarted from the print queue. Mismatched documents in the queue will not prevent correctly matched documents from printing.
- 6.** Specifies that the spooler should favor documents which have completed spooling when deciding which document to print next, even if completed documents are lower priority than documents which are still spooling. If no documents have completed spooling, the spooler will choose larger spooling documents over shorter ones. Use this option if you want to maximize printer efficiency. When this option is disabled the spooler chooses documents based only on their priority settings.
- 7.** Specifies that the spooler should not delete documents after they are completed. This allows documents to be re-submitted to the printer from the spooler instead of printing again from the application program. If you use this option frequently it will require large amounts of disk space on your computer.
- 8.** Specifies whether advanced features, such as pages per sheet, are available, depending on your printer. For normal printing keep this option enabled. If compatibility problems occur you can disable the feature. However, these advanced options may then not be available, even though the hardware might support them.

9. This button provides access to the same setup windows as when printing from applications. Changes made via the Windows Control Panel become the Windows default settings.
10. You can design and specify a separator page that prints between documents. This is particularly useful on a shared printer to help each user find their own documents in the output stack.

NOTE: The above features are provided by the Windows 2000 operating system and will vary with other operating systems.

Device Options tab



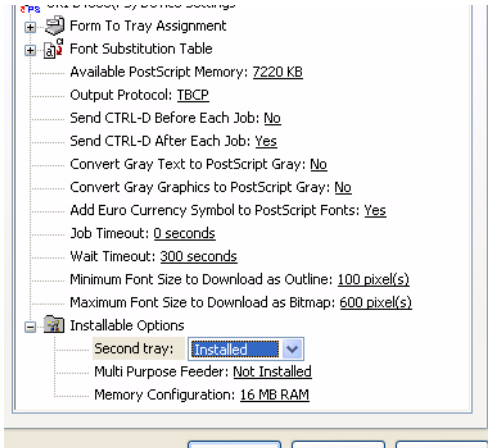
In this window you can select which optional upgrades are installed on your printer. See the chapter entitled “Installing Options.”

PS emulation

For B4500 and B4600 printers with the PostScript 3 option installed.

The main tabs are the General Tab, Advanced Tab and Device Settings Tab. The General and Advanced tabs are the same as for PCL emulation described earlier.

Device Settings tab



1. You can set the desired paper sizes in each of the available paper feed trays.
2. You can make a variety of font settings depending on your application.
3. You can set which optional upgrades are installed on your printer. See the chapter entitled "Installing Options."

Printer settings in Macintosh

Refer to the readme file on the drivers CD, and the online help provided in the driver software.

Consumables and maintenance

This section deals with the replacement of the toner cartridge and image drum and general maintenance.

Consumable order details

Item	Order No.
Toner: 4400, B4500, B4600	43502301
Toner: B4600 only (Higher Yield)	43502001
Image drum	43501901

Always use genuine OKI consumables.

When to replace the toner cartridge

B4400

Replace the toner cartridge after Toner Low displays in the printer Status Monitor. Also, the Error LED indicator slowly blinks when toner is low. After Toner Low displays, the printer will print about 100 more pages then display Toner Empty and stop printing. Printing will resume after a new toner cartridge has been installed.

B4500, B4600

When the toner is running low, TONER LOW is displayed in the operator panel LCD. If printing continues without replacing the toner cartridge, CHANGE TONER is displayed and printing is cancelled. Printing will resume after a new toner cartridge has been installed.

Replacing the toner cartridge

It is recommended that you clean the LED array at the same time as you change the toner cartridge.

The toner used in this printer is a very fine dry powder contained in the toner cartridge.

Have a sheet of paper handy so that you have somewhere to place the used cartridge while you install the new one.

Dispose of the old cartridge responsibly, inside the pack that the new one came in. Follow any regulations, recommendations, etc., which may be in force concerning waste recycling.

If you do spill any toner powder, lightly brush it off. If this is not enough, use a cool, damp cloth to remove any residue. *Do not use hot water, and never use solvents of any kind. They will make stains permanent.*

WARNING! If you inhale any toner or get it in your eyes, drink a little water or bathe your eyes liberally in cold water. Seek medical attention immediately.

Switch off the printer and allow the fuser to cool for about 10 minutes before opening the top cover.

1. Press the top cover release button and open the printer's top cover fully.

WARNING! If the printer has been powered on, the fuser may be hot. This area is clearly labelled. Do not touch.

2. Pull the colored lever on the right side of the toner cartridge towards the front of the printer to close the cartridge then remove the used toner cartridge.
3. Follow the installation instructions on or inside the box containing the new toner cartridge to install the new cartridge.
4. Gently wipe the LED array surface with the LED lens cleaner that came with the new toner cartridge or soft tissue.
5. Close the top cover and press it down to latch it closed.

When to replace the image drum

B4400

When the drum reaches 90% of its life, a CHANGE DRUM message is displayed in the printer Status Monitor. Also, the Error LED indicator slowly blinks when the image drum requires changing. Change the image drum when the print becomes faint or begins to deteriorate.

B4500, B4600

When the drum reaches 90% of its life, a CHANGE DRUM message is displayed in the operator panel LCD. Change the

image drum when the print becomes faint or begins to deteriorate.

Replacing the image drum

It is recommended that you change the toner cartridge and clean the LED array at the same time as you change the image drum.

CAUTION! The green image drum surface at the base of the cartridge is very delicate and light sensitive. Do not touch it and do not expose it to normal room light for more than 5 minutes. If the drum unit needs to be out of the printer for longer than this, please wrap the cartridge inside a black plastic bag to keep it away from light. Never expose the drum to direct sunlight or very bright room lighting. Always hold the image drum unit by the ends or from the top.

1. Press the cover release and open the printer's top cover fully.

WARNING! If the printer has been powered on, the fuser may be hot. This area is clearly labeled. Do not touch.

2. Remove the used image drum and toner cartridge.
3. Follow the installation instructions on or inside the box containing the new image drum to install the new image drum.
4. Gently wipe the LED array surface with the LED lens cleaner that came with the new toner cartridge, or wipe with a soft tissue.
5. Close the top cover and press it down to latch it closed.

Generating a cleaning page

If the printed page shows signs of fading, streaking or erratic marks, the problem may be cleared by generating a drum cleaning page as follows.

B4400

Using the printer Status Monitor

6. Start the **Status Monitor** for the printer.
7. Click on [Printer Setup] tab - [Printer Menu] button - [Test Print tab] - [Cleaning] button.

8. Open the manual feed tray and insert a sheet of letter size plain paper between the paper guides, then click the [OK] button.
9. The printer grips the paper and prints a cleaning page.
10. If subsequent printing appears faded or uneven, try replacing the toner cartridge.

Using the OnLine button

1. Press the OnLine button to take the printer off line.
2. Open the manual feed tray and insert a sheet of letter size plain paper between the paper guides.
3. Press and hold down the OnLine button for at least five seconds.
4. The printer grips the paper and prints a cleaning page.
5. Return the printer on line by pressing the OnLine button.
6. If subsequent printing appears faded or uneven, try replacing the toner cartridge.

B4500, B4600

1. Press the **Online** button to return the printer to off-line status.
2. Open the manual feed tray and insert a sheet of letter size plain paper between the paper guides.
3. Press the **Menu** button repeatedly until MAINTENANCE MENU is displayed, then press the Select button.
4. Press the **Item** button until CLEANING PAGE is displayed.
5. Press the Select button.
6. The printer grips the paper and prints a cleaning page.
7. Return the printer on line by pressing the **Online** button.
8. If subsequent printing appears faded or uneven, try replacing the toner cartridge.

Cleaning the LED array

Clean the LED array whenever a new toner cartridge is installed or if there are faded vertical areas or light printing down a page.

Wipe the LED array gently with the cleaning pad that came with the new toner cartridge or use an anti-static cleaning pad that is generally available for computer cleaning.

Troubleshooting

Status and error messages

Your printer has been designed to give you helpful status feedback not only during normal operation, but also if a printing problem occurs so that you can take appropriate corrective action.

B4400

Both status and error messages are displayed in your chosen language in the Status Monitor, error messages being accompanied by the appropriate flashing of the **Error** indicator. You can set the Status Monitor to pop up on your computer screen when an alert condition occurs from the Preferences tab in the Status Monitor.

B4500, B4600

The LCD on the printer operator panel provides the self-explanatory status and error messages in your chosen language. The Ready indicator goes out when an error message appears.

Paper Jams

Provided that you follow the recommendations in this guide on use of print media, and you keep the media in good condition prior to use, your printer should give years of reliable service. However, paper jams occasionally do occur, and this section explains how to clear them quickly and simply.

Jams can occur due to paper misfeeding from a paper tray or at any point on the paper path through the printer. When a jam occurs, the printer immediately stops, and the operator panel informs you of the event. If printing multiple pages (or copies), do not assume that having cleared an obvious sheet that others will not also be stopped somewhere along the path. These must also be removed in order to clear the jam fully and restore normal operation.

The printer may experience a paper jam in one of three areas.

- **INPUT JAM** - paper has failed to leave the selected feed tray and enter the internal paper path of the printer. A typical message indicates a paper jam and identifies the tray to check.

- FEED JAM - paper has entered the printer but failed to reach the exit. A typical message indicates a paper jam and advises you to open the top cover for access.
- EXIT JAM - paper has reached the exit but has failed to exit completely from the printer. A typical message indicates an exit jam and advises you to open the top cover for access.

Input jam

1. Remove the paper tray from the printer.
2. Remove any crumpled or folded paper.
3. Remove any paper from the underside of the printer.
4. Replace the paper tray.

After successful removal of any damaged or misfed paper, the printer should continue printing.

Feed jam or exit jam

1. Remove the tray and clear any misfed sheets as given above.
2. Open the top cover.

WARNING! The fuser area will be hot. This area is clearly marked. Do not touch it.

CAUTION! Never expose the image drum unit to light for more than 5 minutes. Never expose the image drum unit to direct sunlight. Always hold the image drum unit by the ends or from the top. Never touch the surface of the green drum inside the image drum unit.

1. Carefully lift out the image drum, complete with the toner cartridge. Be careful not to touch or scratch the green drum surface.
2. Remove any jammed sheets from the paper path.
3. Re-install the image drum complete with toner cartridge, ensuring that it correctly locates into the slots on each side of the printer.
4. Close the top cover and press down to latch it closed.
5. The printer will warm up and commence printing when ready. The page lost through the jam will normally be reprinted.

NOTE: If the edge of the jammed paper protrudes (or can be seen) from the exit, reinstall the image drum, close the top cover and switch the printer on. Remove the jammed paper from the exit when the exit roller begins rotating after a few seconds after switching on. However, if the jammed paper cannot be removed, contact a service representative.

Print quality problems

Before consulting a service representative regarding a print quality problem, check the table below to see if there is a solution, or something you might have overlooked.

Symptom	Problem	Solution
Blank sheets printed.	Image drum cartridge not properly installed.	Reinstall image drum cartridge.
	Empty or missing toner cartridge.	Install new toner cartridge.
Entire page prints faintly.	Empty toner cartridge. Pages get fainter when toner is used up.	Install new toner cartridge.
	LED array is dirty.	Clean LED array.
Page has grey background.	Static electricity, generally from dry environments, causes toner to stick to background.	Change paper to a smoother laser bond or use a humidifier.
Page prints all black.	Hardware problem.	Contact service.
Page has repetitive marks.	Damaged image drum cartridge causes repetitive marks every 1.6 inches (4.06 cm) due to surface nicks and scratches.	Generate a cleaning page, repetitive marks may be temporary.
Oblong area of faint print appears on each page.	Drop out caused by using paper exposed to high humidity.	Change paper stocks, check paper storage environment or use a dehumidifier; check toner level.

Symptom	Problem	Solution
Vertical white streaking or faint areas on page.	Toner is low and does not distribute properly, or the drum is worn out.	Replace toner cartridge. Check drum and replace the drum, if necessary. Contact service.
	LED array is dirty.	Clean LED array.
Vertical black lines.	Hardware problem.	Contact service.
Fuzzy print.	LED array is dirty.	Clean LED array.
Distorted print.	Paper path, lamp assembly, or fusing unit problem.	Generate cleaning page. Contact service.
Faded print.	Toner cartridge is not correctly installed.	Install toner cartridge correctly.
	Toner low.	Replace toner cartridge.
Smeared or blotched print.	Dirty rollers; toner dropped inside printer or image drum problem.	Replace image drum and toner. Contact service.
Printed page is light/blurred.	Is toner low?	Replace toner cartridge.
	Is paper meant for laser printers?	Use recommended paper.
	LED array is dirty.	Clean LED array.
Bold characters and dark lines are smeared.	Toner is low.	Install new toner cartridge.
Print is darker than usual.	Darkness setting is too high.	Change darkness setting.
Pages curl excessively.	Printing on wrong side of paper.	Turn paper over in tray. (Note arrow on paper package). Install paper print side down in tray.
	Moisture in paper. Improper storage.	Avoid storing paper in areas of excessive temperature and humidity. Store paper in protective wrapping.
	High humidity.	Recommended operating humidity: 20-80%

Software problems

Your software (operating environment, applications and printer drivers) controls the printing process. Make sure you

have selected the right driver for use with your printer. See your software documentation for more information.

Symptom	Problem	Solution
Printing is garbled.	Incorrect driver is installed.	Install an appropriate driver.
Printer's output is below rated speed.	Much of the printing delays will be caused by your application. Sometimes purely text documents will print slowly depending on the selected fonts and how they are transferred to the printer.	For maximum speed, use text in your document and use a printer resident font.
Size of top margin increases with each page printed.	Creeping text. Number of lines per page in software is not equal to number of lines per page of printer.	Many software packages assume 66 lines per page, but your printer's default is 64. Adjust software accordingly, or set LINES Per PAGE in the soft control panel to equal lines per page in your software.

Hardware problems

Symptom	Problem	Solution
Graphic image prints partly on one page, partly on the next.	Insufficient printer memory for this image at this resolution.	Change the resolution, reduce the image size, or install more memory in your printer.
When you try to print nothing happens, but printer indicates it is ready to receive data.	Configuration error.	Check cable connection. If more than one printer is available, make sure your printer has been selected.
Garbage prints.	Incorrect cable configuration. Also, see Software Problems.	Check cable configuration, continuity, and length.

Symptom	Problem	Solution
Printer freezes or displays error message when computer is rebooted.	Booting the computer while the printer is on can cause a communications error.	Turn printer off before rebooting computer.
Odors.	Gases are given off by forms or adhesives passing through the hot fusing unit.	Make sure the forms you use can withstand heating, and provide adequate ventilation.
Printer is on but must warm up before a job is printed.	Power Save mode is set on to conserve energy. The fuser must heat up before you can begin printing the next job.	To eliminate warm up delay, change Power Save setting

Installing options

The following options are available to extend the performance of your B4400, B4500 or B4600 printer:

- 10/100 BASE-TX Network Interface Card: to make non-network models network compatible
- 32MB, 64MB, 128MB, 256MB RAM DIMM: to extend the main memory of your printer and speed up the processing of large files
- RS232 Board: to provide serial interface capability to the B4600. (*Note: cannot be used with the Network Interface card.*)
- Multi-purpose Feeder tray: to give your printer the ability to handle multiple envelopes and specialty papers.
- Second paper tray: to increase your printer's paper handling capacity by 500 sheets
- PostScript 3 emulation DIMM: to add PostScript emulation to the B4600.

Installation procedure

To install any of the above options, follow the detailed installation sheet that accompanies the option.

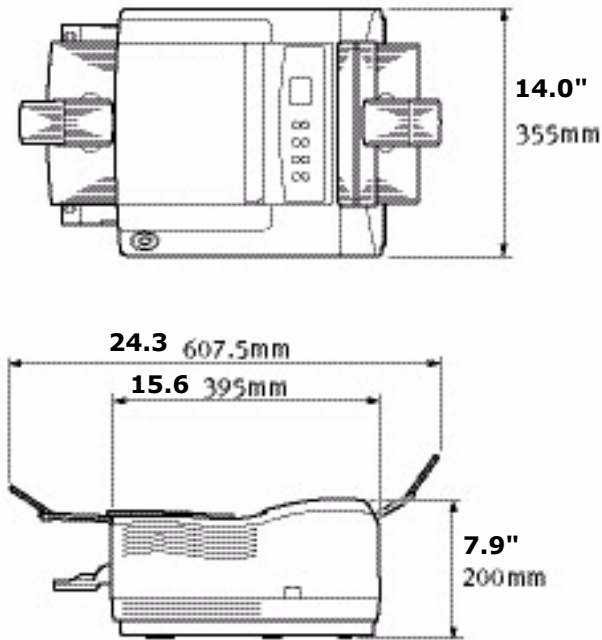
Specifications

General

A summary of the basic characteristics of your printer appears in the table below:

Item	Specification
Dimensions	See the following section entitled "Overall Dimensions"
Weight	20 lbs (9 kg approximately)
Printing method	Electro-photographic printing using LEDs as light source
Print color	Monochrome
Print speed	B4400/B4600: 27 pages per minute maximum B4500: 24 pages per minute maximum
Resolution	600 x1200 dots per inch
Emulations	PCL, Epson FX, IBM ProPrinter. PS emulation optional for B4500, B4600.
Interfaces	USB 2.0 full speed Parallel port in compliance with IEEE 1284-1994 Standard 100BASE-TX/10Base-T;Standard on network models; option for non-network models Optional RS232 Serial interface
Processor	200 MHz PowerPC
Memory	32 MB, expandable to 288MB
Paper sizes	A4, A5, A6, B5, Letter, Legal 13, Legal 14, Executive, Custom, Envelopes (5 types)
Paper feed	Automatic feeding via paper trays Manual feeding of single sheets
Paper feed capacity at 20 lb (80g/m ²)	Tray 1: 250 sheets Optional Tray 2: 500 sheets
Paper output	Face up, Face down depending on paper size, type and thickness
Paper output capacity at 20 lb (80g/m ²)	Face up: 50 sheets Face down: 150 sheets
Consumables	Toner cartridge, Image drum

Overall dimensions



Paper and tray information

Feed and ejection methods vary depending on the type, size and thickness of medium used. Use the chart below and the notes/symbols/terms on the following page for initial

guidance. (Minor variations to settings may be necessary depending on user setup and environmental conditions.)

Paper type	Size	Weight	Feed			Ejection Method		
			T1	T2	MPF	MF	FU	FD
Plain paper	A4	L, ML, M	o	o	o	o	o	o
	A5	MH, H	x	x	o	o	o	x
	B5							
	Letter							
	Executive							
	Legal (13)	L, ML, M	o	o	x	o	o	o
	Legal (14)	MH, H	x	x	x	o	o	x
	A6	L, ML, M	o	x	o	o	o	x
		MH, H	x	x	o	o	o	x
	Custom	L, ML, M	o	o	o	o	o	o
W: 90 – 216	MH, H	x	x	o	o	o	x	
L: 148 – 356								
Envelopes	Com-9	–	x	x	o	o	o	x
	Com-10							
	DL							
	C5							
	Monarch							
	Custom							
W: 90 – 216								
L: 148 – 356								
Labels	A4	–	x	x	o	o	o	x
	Letter							
Transparencies	A4	–	x	x	o	o	o	x
	Letter							

Notes/symbols/terms

NOTE:

1. When an optional second paper tray is used, the original tray is referred to as Tray 1 and the optional tray as Tray 2.
2. It is not possible to use custom paper sizes with the PS driver.

3. Tray 2 can accommodate paper with width of 5.83 to 8.5 inches (148 to 216mm) and length of 8.26 to 12.4 inches (210 to 316mm).
4. Paper less than 8 inches (210mm) long should be ejected face up.

Symbol/Term	Meaning
T1	Paper Tray 1
T2	Paper Tray 2 (optional)
MFT	Manual Feed Tray
MPF	Multi-purpose Feeder tray
FU	Face Up printing from the rear of the printer
FD	Face Down printing from the top of the printer
W, L	Width, Length in mm
L	Light paper weight: 16 lb. (60g/m ²)
ML	Medium Light paper weight: 18-19lb. (67 - 71g/m ²)
M	Medium paper weight: 20-24lb. (75 - 90g/m ²)
MH	Medium Heavy paper weight: 25-27lb. (94 - 101g/m ²)
H	Heavy paper weight: 28-32lb (105 - 120g/m ²)
o	Can be used
x	Cannot be used

Service and support

If you need further assistance or have questions

See our web site: <http://www.okiprintingsolutions.com>

In the U.S. and Canada, call:

1-800-OKI-DATA (1-800-654-3282)

24 hours a day, 7 days a week

Service et soutien

Si vous avez besoin d'une assistance plus approfondie ou si vous avez des questions

Visitez notre site Web multilingue:

<http://www.okiprintingsolutions.com>

1-800-OKI-DATA (1-800-654-3282)

24 heures par jour, 7 jours sur 7

Asistencia Técnica y Soporte

Si necesita más asistencia o tiene preguntas

Visite nuestro sitio web: <http://www.okiprintingsolutions.com>

En los Estados Unidos Y Canadá, llame al

1-856-222-7496 (1-800-654-3282)

las 24 horas del día, los 7 días de la semana.

Mexico: llame al (525) 263-8780

Assistância Técnica e Suporte

Visite nosso site multilingüe na Web: www.okiprintingsolutions.com

Ligue para 5511-3444-3500 (Grande São Paulo)

ou 0800-11-55-77 (central de atendimento).

e-mail: okidata@okidata.com.br

